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## **FINAL REPORT**

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### **ASSESSING THE VIABILITY OF ALL-PAYER SYSTEMS FOR PHYSICIAN SERVICES**

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## **Chapter I**

### **Introduction**





## I. INTRODUCTION

### A. OVERVIEW

One of the widely accepted truths in the debate over health care reform is that United States' spending on health care is probably much higher than it needs to be and has grown at rates that, until quite recently, have shown few signs of abating. Despite broad agreement that reform should improve incentives to lower costs, there persists a divergence of opinions over the type of cost-containment strategies to use. Some argue that, as health care buyers insist on spending less, market forces will lead to innovations in the purchasing and delivery of services to produce desired outcomes. Others maintain that the upward pressure on spending brought about by technological change and the presence of tax subsidies that weaken buyers' incentive to seek out the best deal possible will inevitably lead to some form of regulated cap on spending. Expenditure caps may represent the only solution to the cost problem. Advocates of a regulatory approach generally assume that, once a spending target is determined, a system of provider payment rates that achieve spending goals will be established.

Initially, it might seem that rate setting would only play a role in cost-containment if a regulatory approach were followed. However, as long as a large number of providers are paid on a fee-for-service basis, there is a role for some aspects of rate setting even in market-oriented cost containment strategies. Competition is enhanced when the amount of information available to consumers expands. If buyers knew that all sellers were going to use the same relative prices across services, then the focus of negotiations could be over the overall level of prices. For example, this would simplify the process of a PPO seeking discounted rates with different physician practices, because it would not have to agree on literally hundreds of individual fees.



There have been suggestions that something close to the relative prices based on the relative resource costs employed by Medicare be used as the basis for such a system (Reinhardt, 1994; PPRC, 1994; AMA, 1994).<sup>1</sup>

Because there can be a role for provider payment reform in cost containment that follows either a regulatory or market model, development and analysis of alternatives to the present payment systems should be pursued. There is substantial evidence that rate-setting can be effective. A review of the literature on hospital rate-setting in this country suggests that such systems have been effective (Bovbjerg and Coelen, 1992). All-payer rate-setting systems in Massachusetts, Maryland, New York, and New Jersey have proven successful in controlling hospital costs relative to other states (Thorpe, 1992; Zuckerman, 1987). Evidence suggests that Medicare's prospective payment system based on diagnosis-related groups (DRGs) has also been successful in controlling Medicare's expenditures relative to what they otherwise would be (Coulam and Gaumer, 1991). Medicare's methodology for controlling physician payments also seems to have slowed the rate of growth in spending for physician services (PPRC, 1995). There is also a considerable body of evidence from international experience that indicates that rate-setting systems can be successful (Barer et al., 1988).

An obvious question is: If rate-setting has proven so successful, why hasn't it been universally adopted within the United States? A number of reasons can be offered. One is a strong American preference for marketplace solutions. Americans are highly skeptical of regulatory solutions, particularly ones that involve complex decisions on payments made to providers of an essential service such as health. There is also concern that the political power of

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<sup>1</sup>Maryland, for example, will be requiring use of a universal system of relative prices in 1995, but will not impose dollar limits on payment levels as long as competition among plans is producing desired cost-containment objectives.



providers will render any regulatory body unable to sustain control over an extended period of time. One major reason for this political dilemma is that rate setting that leads to tight control in one state, the traditional locus for these policies, may become intolerable if prices rise dramatically elsewhere. Many of these problems explain the current enthusiasm for managed competition, which puts the burden of difficult decisions on private-sector entities. The government would merely play the role of rulemaker.

The methodologies exist for establishing all-payer rate-setting systems within the United States. Some states have developed the infrastructure for systems that are uniquely their own, e.g., the hospital payment systems in Maryland and New York.<sup>2</sup> All states have the option of building on the considerable work conducted by Medicare in the development of the Prospective Payment System (PPS) for hospitals and the Medicare Fee Schedule (MFS) for physicians. States and private payers have, in some instances, refined these systems for their own purposes. For example, according to the AMA surveys, 70% of states have at least one private plan or public program that has either adopted RBRVS-based payments since 1990, is currently adopting it, or is planning to adapt it (AMA, 1994).

This report focuses on the impact of establishing a payment structure for physician services that could be used in conjunction with various approaches to cost containment. In light of the fact that the Medicare Fee Schedule (MFS), which is based partially on a resource-based relative value scale (RVS), may represent the first major step toward comprehensive revision of physician payment methodologies, we assume the Medicare RVS structure could form the basis of

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<sup>2</sup>Maryland is currently in the process of developing a physician payment system that would be applied to all payers.





broad physician reform.<sup>3</sup>

Under the Medicare RVS, relative physician fees are set on the basis of relative resource costs. Payment rates based on these relative resource costs are derived as the product of a service's relative value units (RVUs) and a dollar conversion factor (CF).<sup>4</sup> When Medicare established its first CF in 1992, it was computed so as to be budget-neutral with respect to current program outlays.<sup>5</sup> This still allowed for a large redistribution in payments for individual services and in specific geographic areas as a result of setting fees based on relative costs.

Assessing the impact of moving to payment systems based on the Medicare RVS involves exploring several analytic questions. These questions each relate to a different phase of this study and, generally, correspond to the subsequent chapters in this report. Issues related to the impact of an RVS system on both private payers and Medicaid are explored. First, how would relative payments among private payers change with the introduction of a fee schedule based on the Medicare RVS? To focus solely on the effects of the Medicare RVS, we would assume that any CF set by a private payer would keep the revenues providers receive the same as they would be under current payment systems. Second, if state-specific private payment systems were developed, how could conversion factors be set that could apply to all payers? This is an important issue to investigate because it is unlikely, given private data systems, that policy makers

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<sup>3</sup>In reality, Medicare's relative value scale may be tailored to the objectives and circumstances of individual payers who choose to use it for physician payment. However, for analytic purposes we build on the actual RVS used in the Medicare system.

<sup>4</sup>Medicare also varies payment rates across geographic areas to reflect differences in practice costs. In addition, Medicare uses separate conversion factors for three distinct types of services - surgical services, primary care and other nonsurgical services. These three CFs evolved from a single CF for most services as a result of the application of separate Volume Performance Standard policies for the different types of services.

<sup>5</sup>The CF was originally calculated to be budget neutral with respect to 1991 and then updated to 1992.





would be able to estimate CFs using data from all payers. Third, how much of a difference would there be between the CFs set by private payers and the CFs currently used by Medicare? In studying this differential, we focus on those private payers, i.e., preferred provider organizations, that have already been successful in lowering the rates they pay relative to traditional indemnity insurers.

Fourth, paralleling the private payer analysis, how would Medicaid payments change if they were based on an RVS system? The complete answer to this question is related to how the policies that Medicaid establishes to define services and adjust payments for special categories of services (e.g., assistant surgeons or only technical component of service provided) compare to those used by Medicare? Given that prior research has shown that these types of payment policies can play a large role in determining how Medicare payments have changed under the Medicare Fee Schedule (Verrilli and Zuckerman, 1995), it is important to understand how Medicaid addresses these issues. It would also have been useful to systematically examine payment policies among private payers. Unfortunately, given the large number of private payers and their diversity such an analysis was not possible.<sup>6</sup>

Finally, we investigated how much of a gap exists between Medicaid fees and those established under the Medicare Fee Schedule? Given that Medicaid payment rates are already well below Medicare, this question helps us examine the potential additional costs Medicaid might incur as a result of moving to an all-payer system. Payment rates for those services most often provided to Medicaid patients are used in this comparison.

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<sup>6</sup>We conducted payment policy surveys for 16 private payers and received completed surveys from 5 payers. Due to variations in each plans payment policies across different types of health plans (e.g., indemnity vs. PPO), the survey results were not meaningful. Therefore, we did not pursue this data collection effort for other private payers.



## B. METHODS

The quantitative assessments of the effects of moving private payers or Medicaid from their current payment systems to one based on an RVS approach all rely on expressing current payments in terms of the RVS structure. In this structure, all payment rates can be determined as the product of relative value units and a conversion factor. Therefore, we derived an approach that allows us to draw on current payment rates and the relative value units contained in the Medicare RVS to compute a series of revenue-neutral conversion factors (RNCFs). Throughout this study, depending on the particular stage of the analysis, these RNCFs are allowed to vary across payers, geographic areas, and types of services.

Conceptually, deriving an RNCF for a payer, type of service or an area is straightforward. The RNCF is the ratio of total spending under current payment rates to the total volume of RVUs represented by the services provided. To be comprehensive, we impute RVUs for services not included in Medicare's RBRVS.<sup>7</sup> Using  $Q_i$  to represent the quantity of service  $i$ ,  $P_i$ , the payment rate, and  $RV_i$  the relative value units from the MFS, the current payment rate for service  $i$  can be expressed as the  $RV_i$  multiplied by an implicit conversion factor ( $CF_i$ ), where  $CF_i$  varies across payers, services and areas and is equal to  $P_i/RV_i$ . This allows us to rewrite RNCF as:

$$RNCF = \Sigma (CF_i * [RV_i * Q_i / \Sigma RV_i * Q_i]).$$

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<sup>7</sup>This imputation (or gap filling) would be accomplished for lab services by assigning RVUs equal to the ratio of the lab fee schedule median amount to the Medicare CF. For other services (e.g., preventive visits), RVUs proposed by HCFA in the 7/14/93 Federal Register as well as those proposed by other non-Medicare payers (e.g., state of Washington or CHAMPUS) would be explored. There will be no consideration of payments for anesthesia or supplies.



This representation shows that we can compute the RNCFs using information on the share of RVs accounted for by each service (the bracketed term inside the parentheses) as opposed to the total service quantities.

As the above formula indicates, any data set used in this study would need to provide information related to current *payment rates* and *RV shares* for a large number of physician services. In our search for data sets, we focused on sources that could provide consistent information across all states. As a result, we did not explore the availability of data from insurers operating in limited geographic areas, e.g., individual Blue Shield plans. The specific data sets we selected for the analysis are discussed in the following chapters, but cannot be identified by name because of the need to assure confidentiality as a term of gaining access to the data.

However, all of the private payer data sets we used meet the minimum standards of containing CPT-4 codes, modifiers or service type variables (where necessary), allowed charges, service volumes and, type of plan indicators (PPO vs. indemnity). All data are for 1993. The Medicaid data are drawn from a survey of a limited number of services and are focused entirely on the allowed payment rate for these services. Medicare data are from the National Claims History System.

It is important to keep in mind three limitations that relate to all of the data. First, none of the data sets are designed to be geographically representative of the service utilization in the areas for which they contain data. Second, none of the data sources are confident in their ability to identify provider specialty. This limits our ability to conduct any analysis of payment differences across specialties. Third, it is impossible to assess the extent to which physicians





balance bill the difference between submitted and allowed charges and collect from patients.

This is not a relevant issue for physicians who are in PPOs, since balance billing is prohibited under these arrangements.

Although we cannot provide much information regarding our private payer data sources, we can be explicit about the data collected from state Medicaid programs. In the initial months of this project, we conducted a survey of all 50 state Medicaid programs to collect data on fees for the 28 most important physician services used by Medicaid recipients and key payment policies applied by the programs. These procedures accounted for about 50 percent of all physician services used by Medicaid patients. The relative value shares for Medicaid patients were derived from tape-to-tape data for Medicaid patients in three states (Michigan, Georgia, and Tennessee). With these data we are able to calculate the equivalent of Medicaid budget neutral conversion factors and also analyze the differences between Medicaid and Medicare fees. Finally, we conducted Medicaid payment policy surveys in all 50 states.

### C. RESULTS

Before moving into the specific analytic chapters of this report, this section contains a brief overview of the study's main findings.

- Chapter II assesses the impact of applying the Medicare Relative Value Scale to private payers. This study shows that many of the same perceived payment inequities that motivated Medicare to adopt RVS are also present in private payment systems. In particular, payments per RVU for procedures are most generous and E&M services least generous among the payers used for this study. So long as a single conversion factor is used, all payers moving to a Medicare RVS can expect redistributions in payments across services and physician specialties comparable to those being experienced by Medicare. These payer-specific results also highlight a number of important issues that policymakers who favor requiring use of the Medicare RVS by private payers would have to address. The most central one relates to what "all-payer" would actually mean. If CFs were allowed to vary by payer, the data required to start and monitor the payment system would be far less than if a rate-setting authority were to establish a single CF. Setting a single, revenue-neutral CF with the same degree of credibility





as the Medicare CF would not be feasible given the present data systems. Moreover, there appear to be at least two classes of payers in the fee-for-service market - one paying near full charges (indemnity plans) and one paying at a substantial discount (preferred provider organizations). In designing a transition to a single CF, policymakers would have to decide what role, if any, these payment differentials would play.

- Chapter III examines various approaches for combining the data on the limited number of private payers available to this study into an "all-payer" system with state-specific conversion factors. Separate analyses are conducted for PPO payers, indemnity payers, and a combination of PPO and indemnity payers. Weights derived from the private payers and Medicare are considered. We conclude that the state-level "all-payer" results are sensitive to the choice of weights. In particular, using Medicare weights tends to result in higher CFs than using private payer weights. As might be expected, PPO conversion factors are the lowest and indemnity the highest, with the combined values at some point in between.
- Chapter IV compares the PPO conversion factors to those embodied in the Medicare Fee Schedule during 1993, the second year of its transition. The results show that, for the two large national payers analyzed, PPOs receive large discounts in physician payment rates relative to the payers' indemnity plans. However, even after these discounts, it is still the case that PPO rates are well above those paid by Medicare. Moreover, the type of inequities that motivated the move to the Medicare Fee Schedule (i.e., low payments for evaluation and management services relative to procedures), are only reduced slightly as a result of the discounts PPOs achieve. These results suggest that, if the two payers we analyze are reasonably representative of the private market, then enrolling Medicare beneficiaries in plans using these private rates is not likely to result in lower spending. In addition, because Medicare rates are still well below the discounted private sector rates, the view that lowering Medicare fees to reduce program costs can be accomplished with no risk to beneficiary access may be overly optimistic.
- Chapter V explores the impact of moving Medicaid from its present set of physician payment systems to one based on the Medicare RVS methodology. Both changes in payment levels and policies are considered. Our analysis of Medicaid payment levels shows, not surprisingly, wide variation in physician fees across states. Moreover, 48 of the 50 states analyzed would have conversion factors below the Medicare Fee Schedule if they were to implement revenue-neutral RVS payment system, given their current payment rates. In addition, for most of the payment policies required to implement an RVS payment system, Medicaid programs currently have rules that are different from those used in Medicare. For example only 8 Medicaid programs define the periods for global surgery packages the same as Medicare and only 6 use rules consistent with Medicare for paying surgical assistants. This suggests that moving to an RVS payment system for Medicaid will involve large changes for most Medicaid programs.
- Chapter VI concludes the report with a comparison of Medicaid and Medicare payment and describes recent trends in Medicaid physician payment rates. The results show that between 1990 and 1993 Medicaid fees grew, on average, by 14 percent, but that considerable variation



in payment generosity exists. In addition, Medicaid fees are still considerably lower than those paid by Medicare. For example, Medicaid primary care fees, on average, 32 percent lower than Medicare.



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## **Chapter II**

### **The Medicare Relative Value Scale and Private Payers: The Potential Impact on Physician Payments**



## II. THE MEDICARE RELATIVE VALUE SCALE AND PRIVATE PAYERS: THE POTENTIAL IMPACT ON PHYSICIAN PAYMENTS<sup>1</sup>

### A. INTRODUCTION

Assessing the impact of moving to a payment system based on the Medicare RVS involves exploring several analytic questions. First, how large would the changes in relative payments brought about by the introduction of a Medicare RVS be? To focus solely on the Medicare RVS, we would assume that any CF set by a payer would keep the revenues providers receive the same as they would be under current payment systems. Second, how much of a difference would there be between the CFs set by non-Medicare payers and the CFs currently used by Medicare? In all likelihood, even if all payers were to move onto a Medicare RVS, there would still be substantial differences between Medicare, Medicaid and various private payer conversion factors. In fact, there could be differences that would continue to exist among private payers. By including this question, we are implicitly assuming that use of the Medicare RVS by non-Medicare payers would not be necessarily associated with a single "all-payer" CF.<sup>2</sup>

If the primary goal of moving to a Medicare RVS payment system is to correct perceived inequities in payments across services or specialties, then the issue of the impact of the Medicare RVS on relative payments is really the central focus of the study. Although the Medicare RVS provides an excellent framework for controlling physician fees, the amount of cost containment that would be sought by payers or policymakers cannot be determined in the context of this chapter. It

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<sup>1</sup>This chapter was written by Stephen Zuckerman and Diana Verrilli.

<sup>2</sup>There is also the issue of how the rules that Medicare uses to define a physician service compares to those currently in use among non-Medicare payers. These rules could have substantial effects on changes in specialty payment differentials and payments for surgical packages, assistant surgeons, and other modified claims. However, establishing the current baseline in payment policies is quite difficult. There is probably not standardization in these rules across payers (in much the same way that Medicare carrier policies varied before the MFS) and it is difficult to determine what impact this had on CF calculations. Therefore, the issue of payment policy changes is not addressed in this report.



seems unlikely, however, that its use would be mandated unless there was at least some interest in gradually lowering private sector CFs. Policymakers may want all CFs to be no more than, say, 15 percent above or below Medicare (in order to protect access or reduce potential cost shifting) or to grow at rate consistent with GDP. Rather than try to guess at the objectives, we focus primarily on the impact of the Medicare RVS on relative fees and the extent to which non-Medicare payers differ from one another in terms of both relative fees and the absolute levels of fees. Analysis of variations among payers will shed light on the feasibility and desirability of using a single private sector CF under a rate-setting model, during either a transitional period or after an all-payer system is fully phased in.

Comparisons to Medicare as suggested by the second question, although of policy interest, are probably somewhat less important, because Medicare CFs would substantially lower private payments for physician services. In this sense, private payer CFs could not be represented as "revenue-neutral" from a system-wide perspective. Therefore, Medicare CFs probably would not be politically-acceptable targets for non-Medicare CFs and a question focused on the impact of moving all payers onto the Medicare Fee Schedule is not immediately relevant. For completeness, however, we do discuss how the non-Medicare CFs implied by current payments compare to those established by Medicare.<sup>3</sup>

The remainder of this chapter is divided into four sections. Section B describes the data sources used to analyze payments by private payers. For purposes of maintaining confidentiality, the names of the payers are not divulged. Only the Health Insurance Association of America (HIAA) Prevailing Charge System is formally identified. In two of the unnamed sources, we are able to consider payment differences implied by the presence of a Preferred Provider Organization

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<sup>3</sup>See chapter IV for a more complete discussion of this issue.



(PPO). Section C presents the methods used to derive revenue-neutral CFs, including our approach to screening the data for outlier observations. Because all services represented in our data did not have RVUs assigned in the Medicare RVS, we needed to develop an approach for filling in gaps so that all services could be included in the study (described in detail in Appendix A). Sections D and V review the findings. Section D presents findings from the perspective of payer-specific national CFs covering all services, major types of services, and selected CPT codes. This is followed in Section E by a review of state level CFs implied by each of the data sources. In order to insure that CFs are based on adequate numbers of observations, the state level results relate only to all services.

## **B. DATA SOURCES**

This analysis relies on data from several individual third-party payers in the private sector.<sup>4</sup> Each data source is able to provide, at a minimum, information on both the price and volume of physician services paid for by a specific payer. The private payer data sources that were available and met this criteria included data from four independent sources. These are the Health Insurance Association of America (HIAA), one major commercial insurer, a company who compiles claims from numerous large employers, and a large national employer. Due to data use agreements, none of these insurers, claims processors, or employers providing data are identified by name. Therefore, each data source is referred as Payer 1 through Payer 3. Because we are able to distinguish between PPO and indemnity claims in two sources of data, we refer to these data using a separate payer number. PPO claims in each dataset are defined by whether the service was rendered by a PPO

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<sup>4</sup>Movement to a true all-payer payment system would include Medicaid. However, because Medicaid is a public payer with substantially lower rates than private payers and very different data systems, the issues involved in assessing movement of Medicaid onto a Medicare RVS system are distinct from those associated with private payers. Therefore, we address Medicaid in a separate report (see Norton, 1994b).







provider and not by the health plan in which the patient is enrolled. Claims for patients enrolled in PPO plans who receive services by non-PPO providers are considered indemnity services and classified accordingly. A summary of these payers is provided below.

Payer 1: Major Commercial Insurer	{ PPO claims Indemnity Claims
Payer 2: Large National Employer	{ PPO Claims Indemnity Claims
Payer 3: Claims from Numerous Employers	{ PPO and Indemnity Claims

Although data for Payer 3 contained a variable which permitted the identification of PPO claims, it was not sufficiently reliable. Therefore, Payer 3 includes a mix of indemnity and PPO claims.

The data sets generally contain CPT-4 codes, payment modifiers or service type variables that indicate cases where only a portion of the medical service was provided (e.g., assistant at surgery, professional component of radiology services, or the technical component of radiology services), submitted charges, allowed charges, and service volumes.<sup>5</sup> The major exception to this is the Health Insurance Association of America data set, which does not report at the insurance-claims level.

The 1993 HIAA Prevailing Health Care Charge Systems (PHCS) provides nationally comprehensive submitted charge data, as opposed to payment data, for medical and 4,840 surgical services. The PHCS is a major source of billed charge data used in the administration of private

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<sup>5</sup> Identifying modified services has important implications for computing mean charges as well as assigning RVUs. In particular, due to large differences in the rates paid to assistants at surgery versus the primary surgeon's payment rate (assistants are typically paid less than 20 percent of the primary surgeon's global fee), the inability to distinguish these claims may result in an underestimation of the mean payment for a particular service and an overestimation of the RVUs assigned to the service.



health benefit programs. The Surgical and Medical PHCS reports are based on 30 and 85 million records, respectively from over 150 major contributors, including Blue Cross and Blue Shield plans, commercial insurance companies, third party administrators and self-insured plans. Data are provided by contributors in 50 states and the District of Columbia and are reported by the first 3 digits of the U.S. postal ZIP codes. Only the providers' submitted charges are included in these data along with the number of claims in each HIAA area. Geographic areas are defined so that each contains adequate numbers of claims in order to permit reliable estimates of mean and median charges for individual physician services. With the exception of the professional component of radiology services, there are no other payment modifiers identified in these data. We assume that physician claims for assistant at surgeons are omitted from these data as a result of the outlier screening performed by HIAA prior to releasing these data for private purchase.<sup>6</sup>

All of the private payer data sources represent 12 months of claims experience except data from the large commercial insurer (Payer 1). These data represent three months of claims experience for approximately 12 million covered lives. The data are drawn from claims processed between July through September of 1993. However, due to the time lags inherent in the processing of medical claims, these data tend to reflect services rendered from late April through mid-August. The prevailing charges used to determine the payment rates for these claims are based on the month in which the service was provided.<sup>7</sup>

All of the data sources contain information on services provided in every state. None of these payers, though, can claim to be representative of all payers in a state. However, the interest in

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<sup>6</sup>There is no written documentation which describes the outlier screening methods used by HIAA. However, through informal discussions with HIAA staff it was suggested that they trim both the upper and lower tails of the distribution of submitted charges per service in order to remove extreme values.

<sup>7</sup>Although the prevailing charge screen is updated every six months, the screens used to determine payments between July and September of 1993 did not change.



being able to analyze payment variations across states, led us to focus on data sources that were national in scope. In reality, there were no available state-specific data bases that could be considered representative of all physician services.

Table II.1 provides a summary of the private payer data sources we use to compute revenue-neutral conversion factors. As shown in the table, the single largest source of physician service data is HIAA, followed by Payer 3, Payer 1 (indemnity) and Payer 2 (indemnity). There are over 6 times as many physician services reported in the HIAA data as there are in the other sources of private payer data. The primary reason for not basing this entire study on HIAA data is that these data represent physician charges as opposed to third-party payment rates. The subsequent analysis shows that some payers' rates differ substantially from charges.

For the purposes of exploring the possibility of computing state-level conversion factors for each payer, we assessed the volume of data reported in each state. This provided a means of determining whether there was sufficient data in each state to compute meaningful CFs. It is important to keep in mind, however, that none of the data sets are designed to be geographically representative of the service utilization in the areas for which they contain data. This is likely to be an important caveat in deriving RVU weights.

The state-specific percent shares of total payments in each database are presented in Table II.2. As a baseline for comparison, the first column of the table shows the distribution of the total non-elderly population across states. For all payers, the percent of the total payments in each state varies widely across states. This variation is sometimes, but not always consistent with the percent of persons in each state. Using the Payer 1 indemnity data, for example, states with relatively large shares of total charges such as California, New York, and Texas also have large percentages of the total non-elderly population. Georgia, on the other hand which has about 2.5 percent of the





**Table II.1**

**Characteristics of Private Payer Data Sources, 1993**

Payer	Months of Data	Number of Covered Lives (millions)	Total Physician Services (millions)	Total Payments (\$ millions)
Payer 1	PPO	.	3.8	\$195.8
	Indemnity	.	11.3	771.2
Payer 2	PPO	4.5	13.6	812.3
	Indemnity	4.5	5.8	377.5
Payer 3	All Claims	4.5	20.3	1,546.1
HIAA Charge Data	12	.	684.0	58,746.3

Source: Urban Institute analysis of 1993 claims from two large private payers.





Table II.2

Distributions of Total Payments,  
By State

State	Percent of Total Non- Elderly Population*	Payer 1		Payer 2		Payer 3	HIAA Charge Data
		PPO	Indemnity	PPO	Indemnity	All Claims	
Alabama	1.64	1.35%	0.74%	5.94%	2.49%	0.65%	0.62%
Alaska	0.22	0.04	1.58	0.17	1.04	0.29	0.32
Arizona	1.39	1.65	0.85	1.04	0.60	0.51	1.11
Arkansas	0.94	0.64	0.77	0.71	0.86	0.38	0.62
California	12.42	17.82	9.43	7.28	4.18	13.47	8.45
Colorado	1.33	1.36	0.66	0.94	1.00	1.53	1.37
Connecticut	1.27	0.63	3.80	0.58	0.76	1.19	1.61
Delaware	0.29	0.04	0.21	0.05	0.47	0.15	0.22
District of Columbia	0.21	0.47	0.46	2.51	3.94	0.18	0.36
Florida	5.07	9.59	4.69	9.56	4.34	4.10	7.26
Georgia	2.57	3.43	5.28	4.68	4.85	3.22	2.50
Hawaii	0.45	0.15	0.15	0.07	0.01	0.24	0.09
Idaho	0.43	0.01	0.29	0.16	0.59	0.34	0.18
Illinois	4.73	2.96	3.68	2.32	4.34	4.39	4.24
Indiana	2.20	2.46	2.40	1.92	1.95	2.94	3.62
Iowa	1.11	0.04	0.47	0.88	0.59	0.33	0.58
Kansas	1.00	2.57	0.63	1.56	0.90	0.45	0.65
Kentucky	1.43	0.97	1.50	0.87	0.98	1.94	0.90
Louisiana	1.67	1.23	1.33	1.19	1.93	0.76	1.06
Maine	0.50	0.03	0.35	0.21	0.83	0.19	0.25
Maryland	1.93	1.88	2.17	15.38	12.94	1.39	1.64
Massachusetts	2.29	0.71	1.36	2.02	0.95	1.84	3.92
Michigan	3.69	1.85	2.69	1.09	0.94	12.79	1.64
Minnesota	1.74	0.48	0.71	0.55	0.78	0.44	1.49
Mississippi	1.07	0.48	0.84	0.97	1.31	0.24	0.67
Missouri	2.06	2.64	1.41	0.74	2.30	2.79	2.22
Montana	0.33%	0.01%	0.15%	0.02%	0.58%	0.09%	0.14%



Table II.2 (continued)

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State	Percent of Total Non- Elderly Population*	Payer 1		Payer 2		Payer 3	HIAA Charge Data
		PPO	Indemnity	PPO	Indemnity	All Claims	
Nebraska	0.65	0.23	0.32	0.37	0.45	0.11	0.78
Nevada	0.51	0.32	0.52	0.49	0.49	0.23	0.57
New Hampshire	0.46	0.07	0.32	0.09	1.05	0.32	0.35
New Jersey	3.05	0.73	5.90	2.26	2.37	3.09	4.48
New Mexico	0.62	0.01	0.23	0.58	0.67	0.21	0.26
New York	7.02	1.29	11.40	0.77	4.25	6.05	13.62
North Carolina	2.59	1.37	3.33	2.13	1.24	1.99	2.00
North Dakota	0.25	0.00	0.11	0.23	0.44	0.04	0.42
Ohio	4.36	8.91	4.80	1.55	1.75	6.12	5.00
Oklahoma	1.25	1.16	0.85	2.25	2.15	0.65	0.86
Oregon	1.17	0.55	0.62	0.67	0.80	0.39	0.45
Pennsylvania	4.66	3.28	4.14	4.33	1.50	3.93	5.51
Rhode Island	0.37	0.01	0.09	0.36	0.07	0.08	0.73
South Carolina	1.43	0.44	1.58	1.48	1.11	0.97	1.21
South Dakota	0.27	0.01	0.19	0.10	0.51	0.05	0.17
Tennessee	1.95	2.56	2.25	0.56	3.06	1.46	2.87
Texas	6.97	16.26	8.00	2.44	7.61	9.00	6.03
Utah	0.73	0.77	0.34	0.02	0.02	0.29	0.40
Vermont	0.23	0.01	0.07	0.10	0.15	0.19	0.12
Virginia	2.57	3.14	2.52	13.00	10.76	1.93	1.77
Washington	2.00	1.20	1.19	2.14	1.01	3.39	1.90
West Virginia	0.68	0.66	0.73	0.54	0.82	0.43	0.89
Wisconsin	1.94	1.60	1.77	0.02	0.88	2.19	1.56
Wyoming	0.19	0.01	0.15	0.09	0.39	0.08	0.10

\* 1993 total non-elderly population = 221,589,828



population, has over 5 percent of the indemnity charge data. The distribution of HIAA charge data across states comes the closest to resembling the percent of the population residing in each state.

It is important to keep in mind several limitations that relate to all of the data. First, none of the data sources are confident in their ability to identify provider specialty. This implies that examining specialty differentials, although potentially relevant is impossible. Second, only two payers' data allow us to distinguish claims paid to PPO providers from those paid to others. This shortcoming means any payment discounts achieved by Payer 3 cannot be detected. Finally, it is impossible to assess the extent to which physicians balance bill the difference between the submitted and allowed charges and collect from patients. This is not as relevant for physicians who are PPO members, since balance billing is prohibited under these arrangements.

## **DATABASE DEVELOPMENT AND EDITING**

With the exception of the HIAA data, all of the private payer data sources we received were provided in "raw" claims level form. In addition to physician services, the files generally included claims for facility charges, ambulance services, and medical supplies and durable medical equipment (DME). We therefore carefully reviewed and edited each source of data in order to develop analytic files which consisted of claims for physician services and clinical laboratory services only.<sup>8</sup>

We used the same general approach to review and clean each of the datasets.<sup>9</sup> This editing involved omitting claims with invalid CPT-4 or five digit ZIP codes, claims for medical supplies,

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<sup>8</sup> With the exception of anesthesia, oncology and dialysis services all physician services and clinical laboratory tests are included in this analysis.

<sup>9</sup>Because HIAA is extensively edited before it is made available for public use, it was not necessary to include these data in this review. We did, however, use these data as a basis for comparing data from other sources.





DME and ambulance services, and claims for oncology, dialysis and anesthesia services.<sup>10</sup> In each dataset, about 10-15 percent of the total charges were dropped as a result of this process.

In addition to omitting selected physician and non-physician services and erroneous CPT-4 and zip codes, we examined the variation in payments, submitted charges, and service quantities for selected high volume procedures in order to investigate possible anomalies in the data. We also reviewed payments for services typically modified by an assistant at surgery (e.g., coronary artery bypass graft) and services often delineated in terms of a technical and professional component and developed an approach to assign a modifier to these services. Finally we also considered different approaches to detect outliers. The process we use to drop outlier records is discussed in the Methods section of this chapter.

Since a true modifier field was not reliably defined in any of the databases, where possible, we created modifiers to delineate claims involving an assistant at surgery as well as claims which define the professional component of radiology services. Identification of these two modifiers is important because they result in payments and RVUs per service which are substantially less than services which are not modified (i.e., assistant surgeons are typically reimbursed about 20% of the primary surgeon's global fee).

Payer 2 includes a variable which the documentation suggests can be used to identify whether the claim is for the professional or technical component of a service. When this field in the data set is blank the user is instructed to assume that the claim is for a full or global service. As mentioned above, we reviewed the payments and service volume for these services to determine how often the modifiers were used and to what extent their fees reflected the modified service.

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<sup>10</sup>While three-digit zip codes could have been used to identify states, in light of the low volume of services with invalid codes, it was not effective to pursue.





Because the facility typically bills separately for the technical portion of the radiology service, the only physician claim that should be reported for radiology services rendered in non-office settings, is the professional component. This review would therefore enable us to determine whether or not the modifier field was correctly defined.

Review of the Payer 2 data suggested that most of the radiology claims provided in a non-office setting were not modified (i.e., they were reported as apparently global services), but had payments that seemed unreasonably low. The low global fees for these services suggested that it was unlikely that the payments fully covered both the professional and technical components of the service. In particular, the global fees tended to reflect fees for the professional component of the service. This finding was consistent across a broad range of radiology services including standard imaging (e.g., chest X-rays), advanced imaging (Magnetic Resonance Imaging (MRIs) and Computerized Axial Tomography (CAT scans)), echographies and nuclear medicine services. These findings suggest that the variable used to identify the professional and the technical component was not particularly reliable.

Based on these findings, we assumed that Payer 2 payments for radiology services provided in an inpatient or outpatient setting reflected the professional component of the service only. Therefore, we generated a professional component modifier for each unmodified radiology claim that was rendered in an inpatient or outpatient department. We examined global radiology services reported in Payer 1 and Payer 3 data and drew similar conclusions, i.e., the charges for radiology services provided in an inpatient and outpatient setting reflected payments consistent with the professional component of the service. Therefore we created a professional component modifier using the same criteria we used for the Payer 2. An approach similar to this has been required in analyses of Medicare data in order to correct apparent inconsistencies in modifiers as well.



Finally, each of the datasets contained a variable that we could use to identify claims for assistant surgeons. Using this variable we created a modifier field to define assistant at surgery claims in each dataset. As mentioned above, it was not possible to identify these services in the HIAA data.

### **C. METHODS**

Our methods for analyzing the impact of moving toward a Medicare RVS payment system for all payers can be divided into three parts. First, we decide how comparisons between current methods and an RVS approach will be made. Because all Medicare RVS-based payments can be expressed as the product of a conversion factor and the RVUs (the sum of work, practice expense and malpractice expense RVUs), comparisons based on the CF will be most straightforward once we express current fees in terms of RVUs and CFs that are implicitly reflected in current rates. A formal derivation of implicit CFs that are revenue-neutral relative to current payments is presented. Second, we describe a method for estimating RVUs for services that were not assigned RVUs under the Medicare RVS. This is critical because RVUs are required for all non-Medicare services in order to allow us to compute implicit CFs and Medicare RVS fees for all services in these data. Third, we outline the data editing and computations required to produce the revenue-neutral CFs for specific physician services, groups of services, and all services (nationally as well as by state).

### **REVENUE-NEUTRAL CONVERSION FACTOR**

The concept of a revenue-neutral conversion factor,  $CF_i$ , for any given service  $i$  is quite straightforward. It is the CF for service  $i$  that would have to exist so that the product of it and the RVUs for the service would equal the current average payment. This implicit CF is simply the ratio



of the current average payment rate,  $P_i$  to the number of total RVUs assigned to that service in the Medicare RVS,  $RVU_i$ . Algebraically, this can be expressed as  $CF_i = P_i / RVU_i$ . A CF that is revenue-neutral across all services, would be equal to the ratio of total spending under current payment rates to the total volume of RVUs represented by the services provided. Using  $Q_i$  to represent the quantity of service  $i$ , we can write:

**Formula 1:** 
$$RNCF = \sum P_i * Q_i / \sum RVU_i * Q_i.$$

This computation requires information on both payment rates and total service quantities for each payer, by geographic area. Data of this type are available for each of the payers used in this study. However, it is obvious that the volume data that is available does not come close to representing total service volume for the entire privately-insured population. Although it is equally true that the payment rates reported in these data are not necessarily representative of all payers, it is much more plausible that they are closer to the overall averages than are the volume data to total volume.

With this in mind, we present an equivalent formulation of the RNCF that relies on the available data, thereby reducing the requirements for data on total service volume. Expressing  $P_i$  as the product of  $CF_i$  and  $RVU_i$ , the formula for RNCF can be written as:

**Formula 2:** 
$$RNCF = \sum (CF_i * [RVU_i * Q_i / \sum RVU_i * Q_i]).$$

This representation shows that the RNCF can be computed as the weighted average of the service-specific CFs, where the weights are the shares of the total volume of RVUs the services accounts for within a payer's service mix as opposed to the total service quantities. Although we still need the





individual payment rates to compute  $CF_i$ , being able to rely on service-specific RVU shares instead of exact quantities makes the assumptions needed to move ahead with available data sources more credible.<sup>11</sup> Specifically, we would need to assume that the service-specific RVU shares in our data are representative of other payers or areas. An assumption about the similarity of service-specific RVU shares across payers seems much more reasonable than an analogous one related to absolute service volumes. In addition, this second formulation simplifies the comparison between current methods and Medicare RVS methods by allowing all discussion to be in terms of the movement from the current implicit service-specific CFs and a single overall CF (or, at least a greatly reduced number of CFs).

#### **GAP-FILLING RVUs**

In order to be able to derive revenue-neutral CFs for non-Medicare payers, we must be able to attach an RVU to each service. For most services, we assign the RVU that appears in the Medicare RVS to the non-Medicare service. This is appropriate because the Medicare RVS was developed to be applied to services used by any patient population, not simply the elderly. However, there are a number of medical services for which HCFA did not develop RVUs, including clinical laboratory services and services typically provided to younger patients such as preventive medicine visits, neonatal visits, obstetrical services, and elective plastic surgery. Therefore, in cases where there are no RVUs provided for a particular service, we separately impute work, practice expense, and malpractice expense RVUs. In Appendix A, we discuss the development of a single consistent set of RVUs from the several years of Medicare RVSs that exist and describe methods used to impute RVUs for physician services and clinical laboratory services that are not currently

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<sup>11</sup>Service-specific RVU shares are computed on a CPT-code basis and represent the total RVUs for a specific service multiplied by the number of services reported and divided by the sum of this product across all services.





part of the Medicare payment system, but presumably would have to be included in a payment system that applied to non-Medicare payers.

Briefly, there are two basic approaches that we use to impute RVUs, depending on the type of service. For clinical laboratory services (Medicare does not include these services in RVS), we derive RVUs using the algebraic relationship that allows us to derive the implicit CF above. However, in this instance, we know the price paid and the Medicare conversion factor for nonsurgical services and we can solve for the implicit RVUs for each service. Specifically, we set total RVUs for each laboratory service equal to the ratio of the maximum 1993 Medicare payment amount (60 percent of the national prevailing charge) to the 1993 Medicare conversion factor for nonsurgical services. This should be viewed as the RVUs implicit in the Medicare fee screens for office-based laboratory services. For other physician services, RVUs are imputed based on the relationships between charges and RVUs for the services included in the Medicare RVS and charges for excluded services. These imputations are based on RVUs and charges for groups of services within the Medicare RVS, so as to avoid the undue influence of potentially anomalous services. Interested readers are referred to Appendix A for further details.

Table II.3 shows the share of payments for which RVUs were imputed by payer. Between 13 and 15 percent of payments were assigned imputed RVUs. However, approximately three-quarters of these imputed RVUs were assigned to laboratory services - services explicitly excluded from the Medicare RVS. This suggests that there are very few physician services that Medicare did not include in the RVS that appear in these private data bases. As a result, the CFs we compute for all services or by types of services are unlikely to be influenced greatly by services with imputed RVUs.



Table II.3

## Percent of Total Payments with Imputed RVUs\*

Payer		Percent of Total Payments with Imputed Values		
		All Services	Clinical Laboratory Services	Physician Services
Payer 1	PPO	15.7%	10.4%	5.3%
	Indemnity	12.8	9.4	3.4
Payer 2	PPO	8.0	5.2	2.8
	Indemnity	9.7	6.4	3.3
HIAA		13.5	10.0	3.5

\* Percentages are not available for Payer 3.



## CONVERSION FACTOR COMPUTATIONS

Given the claims-based structure of the data sets and the similarity in their data elements, we are able to apply the same approach to computing CFs in all cases. Although aggregated to geographic areas, the HIAA data can be treated in an analogous manner. Because each area for which a CPT code appears is a separate observation in HIAA, it can be viewed the same as if it were a "claim" in one of the true claims-based data sets. For all of the data sets, claims with apparently erroneous payment or charge data are screened out, RVU shares derived, and RNCFs computed.

The initial step in working with these files is to screen out erroneous claims. The goal is to remove those claims (defined by CPT code and modifier) that seem to have very high or very low average payments or charges. This should eliminate claims for partial payments, modified services that are not adequately identified and simple errors in the data. Serious errors could be introduced if claims for assistant surgeons or follow-up surgical care only - both legitimate CPT modifiers - were included with claims for a global surgical service.

Given the large number of CPT/modifier combinations that define services, it is impractical to review the data sets on a service-by-service basis. Instead, we apply an approach used by HCFA actuaries and PPRC. This approach relies on payments or charges per service and eliminates (i.e., sets to missing) all claims that are more than three times or less than one-third of the mean payment or charge for the service. In this study, we screen claims based on the service-specific implicit CFs derived as part of the process of computing the national average CF for each service. In order to avoid screening out disproportionate numbers of claims from high- or low-cost areas, we adjust RVUs by the GPCI before deriving the implicit CFs.

The expression used to compute the implicit CF from claims for service *i* in area *j* follows the payment rule in the MFS and is:



**Formula 3:**

$$CF_j^i = \frac{payment_{ij}}{(G_W RVU_{Wi} + G_P RVU_{Pi} + G_M RVU_{Mi})}$$

where:

- $G_W$  = full work GPCI or GPCIFW96
- $G_P$  = practice expense GPCI or GPCPE96
- $G_M$  = malpractice expense GPCI or GPCIMP96
- $RVU_{Wi}$  = work RVU or WorkRVU93
- $RVU_{Pi}$  = practice expense RVU or PPCRVU93
- $RVU_{Mi}$  = malpractice expense RVU or MalRVU93
- $payment_{ij}$  = allowed charge or covered charge
- $i$  = service (or CPT-4 code)
- $j$  = area (or county code)

Since laboratory services do not have separate RVUs for work, malpractice, and practice expenses, we compute conversion factors for these services using the following formula:

**Formula 4:**

$$CF_j^i = \frac{(payment_i)}{(FWGAF96) (TOTRVU93_i)}$$

where:  $FWGAF96$  = full work geographic adjustment factor (GAF)  
 $TOTRVU93_i$  = total RVU (including work, practice expense and malpractice expense RVUs)

The full work GAF is a weighted average of the full work GPCI, the practice expense GPCI, and the malpractice GPCI, where the weights are equal to the proportion of average practice revenues







accounted for by each practice cost category.<sup>12</sup> Given these  $CF_j^i$ , we compute the national average CF for service  $i$  as:

**Formula 5:**

$$\overline{CF}^i = \frac{\sum_{j=1}^N CF_j^i}{N}$$

where:  $N$  = number of claims for service <sub>$i$</sub>

Each  $\overline{CF}_i$  is computed separately by payer and type of plan (e.g., PPO and indemnity). It is at this point that the screening algorithm is applied. Not surprisingly, variation underlying the  $\overline{CF}_i$  is reduced as a result of this screening. Table II.4 shows the average coefficient of variation for individual services both before and after the screening and the share of total payments that were screened out of each data set. Despite the exclusion of claims accounting for only about 2 percent of payments, the screening algorithm reduces the coefficients of variation by approximately 20 to 25 percent. The only exception to this was HIAA. The algorithm had little impact on the HIAA data in terms of either payments dropped or coefficients of variation. Presumably, this is due to aggregated nature of these data and the screening that HIAA does prior to releasing its data for public use.

The effect of the screening is to increase the  $\overline{CF}_i$ , suggesting that more low rather than high payments are being screened out of the data. This implies that we may not have adequately identified some claims that represented low payments for modified services and partial payments

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<sup>12</sup>We use the full-work GPCI because it is a better overall indicator of physician time cost differences and because there is no reason to assume that the same motivations that resulted in the quarter-work GPCI for Medicare would be present in all-payer payment policy.



Table II.4

Changes in the Coefficient of Variation for All Services  
Before and After Screening the Data

Payer		Coefficient of Variation, Before Screen	Coefficient of Variation, After Screen	Percentage of Total Payments Dropped
Payer 1	PPO	44.33	35.52	1.48%
	Indemnity	55.04	40.03	2.11
Payer 2	PPO	48.43	38.06	0.42
	Indemnity	49.05	37.53	1.65
Payer 3	All Claims	59.95	40.24	7.49
HIAA		32.50	30.21	0.04



when we created the analytic files described in the Data section above. The screened data are used to recompute the  $\overline{CF}_i$  that are used in the derivation of the RNCFs.

The other component of the RNCF formula is the RVU share for each service. These shares,  $SHRVU_i$ , are computed for each payer and type of plan as:

**Formula 6:**

$$SHRVU_i = \frac{RVU_i Q_i}{\sum RVU_i Q_i}$$

where  $RVU_i = TOTRVU93$   
 $Q_i =$  total number of services

For services with separate work, practice expense, and malpractice RVUs, TOTRVU93 is the sum of the three components. These elements are then combined in the equation for the RNCF as follows:

**Formula 7:**

$$\begin{aligned} RNCF &= \frac{\text{Total Payments}}{\text{Total RVUs}} \\ &= \sum CF_i \left( \frac{RVU_i Q_i}{\sum RVU_i Q_i} \right) \end{aligned}$$

An RNCF is generated for all services as well as for broadly defined types of services.<sup>13</sup> In addition,  $\overline{CF}_i$  and  $SHRVU_i$  are computed by state to allow us to derive RNCFs for each state.<sup>14</sup>

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<sup>13</sup>We use the Berenson-Edgers-Holahan type of service classification algorithm to group services into clinically-meaningful and analytically-useful categories.

<sup>14</sup>However, the claims-level data screening is not re-done on a state-by-state basis. The same claims used to compute the national RNCF are used in the state-level calculations.



## D. NATIONAL RESULTS

Table II.5 presents revenue-neutral conversion factors for each of the payers represented in our data. There are several similarities in these results across the payers. First, the implicit conversion factors for All Services are well above the conversion factors set by Medicare. For example, the highest conversion factor for Medicare (the conversion factor for surgery of \$31.96 in 1993) was 71 percent of the PPO Payer 1 All Services conversion factor of \$44.81 and 69 percent of the PPO Payer 2 all service conversion factor of \$46.43. In comparison to the other All Services conversion factor, Medicare was even less generous.

As might be expected, the highest conversion factors, within each payer, are for procedures. These are followed, in descending order, by the conversion factors for imaging, tests, and evaluation and management (E&M) services. In all instances, payments for endoscopy services and imaging procedures (e.g., cardiac catheterization) are the highest. These relationships are consistent with Medicare in the pre-MFS era and are a principal reason why RVS may seem desirable to many payers. As a result of these patterns, Medicare RVS payments are least generous relative to private fees for procedures and most generous for E&M services.

Perhaps the most important results contained in Table II.5 relate to conversion factor differentials across payers. Both the PPO payment levels are fairly close to each other, with All Services conversion factors of about \$45 and \$46 and both are below the indemnity payment level within each payer. In fact, the indemnity payment levels for Payer 1 are quite close to actual average physician charges as reflected in the HIAA submitted charge data. This seems to suggest that the current fee-for-service market for physician services is characterized by at least two distinct classes of payers - one paying close to full charges and one paying at a substantially discounted payment level. The conversion factors for Payer 3 are typically between the indemnity and PPO





Table II.5

National Revenue-Neutral Conversion Factors  
by Type of Payer

TYPE OF SERVICE GROUPS	Payer 1		Payer 2		Payer 3	HIAA Charge Data
	PPO	Indemnity	PPO	Indemnity	All Claims	
<b>All Physician Services</b>	<b>\$44.81</b>	<b>\$58.66</b>	<b>\$46.43</b>	<b>\$50.05</b>	<b>\$52.73</b>	<b>\$58.09</b>
<b>IMAGING SERVICES</b>	<b>56.78</b>	<b>66.96</b>	<b>57.25</b>	<b>66.86</b>	<b>57.12</b>	<b>67.05</b>
Standard Imaging	58.25	68.79	58.17	67.97	60.74	73.27
Advanced Imaging	56.99	62.54	51.81	63.90	56.60	66.33
Echography	50.79	64.56	55.72	63.21	50.24	54.43
Imaging/Procedure	68.07	79.39	70.87	79.26	59.85	86.49
<b>EVALUATION AND MANAGEMENT (E/M)</b>	<b>31.62</b>	<b>43.34</b>	<b>36.88</b>	<b>40.49</b>	<b>40.48</b>	<b>43.03</b>
Office Visits	31.06	42.22	37.61	41.03	37.86	42.23
Hospital Visits	37.89	47.29	39.63	44.80	50.42	45.71
Emergency Room Visits	54.99	61.08	45.13	50.51	48.72	57.42
Nursing Home Visits	30.32	37.44	33.05	33.62	31.48	34.04
Specialist E/M	23.48	35.72	31.51	37.68	40.95	40.51
Consultations	37.49	46.65	39.50	44.15	40.63	45.87
<b>PROCEDURES</b>	<b>59.36</b>	<b>73.23</b>	<b>57.62</b>	<b>65.09</b>	<b>66.09</b>	<b>73.08</b>
Major Procedures - General	58.72	77.21	59.54	72.15	66.34	71.69
Major Procedures - Cardiac	67.84	81.14	62.79	68.78	68.80	76.82
Major Procedures - Orthopedic	64.50	82.71	57.77	69.56	70.90	73.69
Eye Procedures	62.17	74.18	59.07	66.40	65.07	69.60
Ambulatory Procedures	59.38	79.95	56.19	64.31	66.07	79.55
Minor Procedures	47.14	57.15	44.95	51.40	55.37	60.10
Endoscopy	73.65	92.08	66.95	79.57	75.88	88.04
<b>TESTS</b>	<b>47.54</b>	<b>59.81</b>	<b>45.97</b>	<b>55.07</b>	<b>52.89</b>	<b>62.37</b>
Laboratory Tests	47.48	59.51	44.77	54.17	49.36	59.79
Other Tests	47.69	60.58	47.96	56.87	61.97	67.03



conversion factors for Payers 1. This is consistent with the fact that Payer 3 data reflects both indemnity and PPO claims.

If each of the payers were governed by a Medicare RVS and used a single All-Services conversion factor, how would average payments change across types of services? This question is explored in Table II.6. Not surprisingly, those services with the highest conversion factors in Table II.5 would experience the largest payment rate reductions as a result of movement to a Medicare RVS, and vice-versa. Payments for major, eye, and ambulatory procedures would fall by 16 to 31 percent. Endoscopy fees would be reduced, on average, to two-thirds of their present levels. The only category of procedures that would have fees similar to current levels would be minor procedures (e.g., removal of skin lesions and repair of simple fractures). This suggests that current payments for minor procedures closely reflect relative resource costs, assuming the Medicare RVS can be used to approximate these costs. Payments for other services would also change. Standard imaging, advanced imaging and echography payment rates would fall between 6 and 27 percent. Imaging services that involve a procedure would fall by almost as much as endoscopies. Tests, on the other hand, would experience relatively modest reductions of mostly less than 10 percent. With the exception of Payer 1 indemnity and HIAA emergency room visits, all categories of E&M services would see double-digit increases in average payment rates. However, the increases for hospital-oriented visit categories (hospital visits, consultations, and emergency room) are smaller than those for other E&M services.

Table II.7 focuses in on the effect a single conversion factor could have on some of the most important individual services. Generally, these service effects are consistent with the results in Table II.6. However, there are a few exceptions worth noting. First, the payment for total obstetrical care would fall by much less than other major general procedures - ranging from 2 to 25





Table II.6

Percent Change in Average Payment Rates When a Single  
Revenue-Neutral Conversion Factor is Used,  
by Type of Service

TYPE OF SERVICE GROUPS	Payer 1		Payer 2		Payer 3	HIAA Charge Data
	PPO	Indemnity	PPO	Indemnity	All Claims	
Conversion Factor for All Physician Services	\$44.81	\$58.66	\$46.43	\$50.05	\$52.73	\$58.09
<b>IMAGING SERVICES</b>	<b>-21.3%</b>	<b>-12.4%</b>	<b>-18.9%</b>	<b>-25.1</b>	<b>-7.7</b>	<b>-13.4%</b>
Standard Imaging	-23.1	-14.7	-20.2	-26.4	-13.2	-20.7
Advanced Imaging	-21.4	-6.2	-10.4	-21.7	-6.8	-12.4
Echography	-11.8	-9.1	-16.7	-20.8	5.0	6.7
Imaging/Procedure	-34.2	-26.1	-34.5	-36.9	-11.9	-32.9
<b>EVALUATION AND MANAGEMENT (E/M)</b>	<b>41.7</b>	<b>35.3</b>	<b>25.9</b>	<b>23.6</b>	<b>30.3</b>	<b>35.0</b>
Office Visits	44.3	38.9	23.5	22.0	39.3	37.6
Hospital Visits	18.3	24.0	17.2	11.7	4.6	27.1
Emergency Room Visits	-18.5	-4.0	2.9	-0.9	8.2	1.2
Nursing Home Visits	47.8	56.7	40.5	48.9	67.5	70.7
Specialist E/M	90.8	64.2	47.4	32.8	28.8	43.4
Consultations	19.5	25.7	17.5	13.4	29.8	26.6
<b>PROCEDURES</b>	<b>-24.5</b>	<b>-19.9</b>	<b>-19.4</b>	<b>-23.1</b>	<b>-20.2</b>	<b>-20.5</b>
Major Procedures - General	23.7	-24.0	-22.0	-30.6	-20.5	-19.0
Major Procedures - Cardiac	-33.9	-27.7	-26.1	-27.2	-23.4	-24.4
Major Procedures - Orthopedic	-30.5	-29.1	-19.6	-28.0	-25.6	-21.8
Eye Procedures	-27.9	-20.9	-21.4	-24.6	-19.0	-16.5
Ambulatory Procedures	-24.5	-26.6	17.4	-22.2	-20.2	-27.0
Minor Procedures	-4.9	2.6	3.3	-2.6	-4.8	-3.3
Endoscopy	-39.2	-36.3	-30.6	-37.1	-30.5	-34.0
<b>TESTS</b>	<b>-5.7</b>	<b>-1.9</b>	<b>0.7</b>	<b>-9.1</b>	<b>-0.3</b>	<b>-6.9</b>
Laboratory Tests	-5.6	-1.4	3.7	-7.6	6.8	-2.8
Other Tests	-6.0	-3.2	-3.2	-12.0	-14.9	-13.3



Table JI.7

Percent Change in Average Payment Rates When a Single  
Revenue-Neutral Conversion Factor is Used,  
by Selected CPT-4 Codes

CPT-4 Code and Payer		Current Payment	New Payment	Percentage Change
<b>PAYER 1 -- PPO</b>				
17100	Destruction of benign facial lesion	42.54	42.57	.1
29881	Knee arthroscopy with meniscectomy	1,718.41	943.29	-82.2
33512	CABG, 3 vessels	5,851.03	3,029.60	-93.1
45378	Diagnostic colonoscopy	580.35	377.75	-53.6
47605	Cholecystectomy	1,499.71	983.13	-52.5
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	1,773.49	1,659.31	-6.9
70551	MRI - brain (global)	768.60	624.20	-23.1
70551-26	MRI - brain (PC)	182.66	103.06	-77.2
93000	EKG with interp. and report	47.72	35.85	-33.1
99213	Established patient, office visit, 15 minutes	32.77	44.81	26.9
<b>PAYER 1 -- Indemnity</b>				
17100	Destruction of benign facial lesion	52.89	55.73	5.1
29881	Knee arthroscopy with meniscectomy	2,126.60	1,234.79	-72.2
33512	CABG, 3 vessels	5,985.49	3,966.00	-50.9
45378	Diagnostic colonoscopy	675.86	494.50	-36.7
47605	Cholecystectomy	1,780.70	1,287.00	-38.4
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	2,211.70	2,172.18	-1.8
70551	MRI - brain (global)	886.33	817.13	-8.5
70551-26	MRI - brain (PC)	238.50	134.92	-76.8
93000	EKG with interp. and report	55.01	46.93	-17.2
99213	Established patient, office visit, 15 minutes	44.09	58.66	24.8





Table II.7 (continued)

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CPT-4 Code and Payer		Current Payment	New Payment	Percentage Change
<b>PAYER 2 -- PPO</b>				
17100	Destruction of benign facial lesion	40.03	44.11	8.6
29881	Knee arthroscopy with meniscectomy	1,517.13	977.35	-55.2
33512	CABG, 3 vessels	4,564.85	3,139.81	-45.4
45378	Diagnostic colonoscopy	553.38	391.40	-41.4
47605	Cholecystectomy	1,373.09	1,018.83	-34.8
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	1,825.56	1,719.30	6.2
70551	MRI - brain (global)	679.35	646.77	-5.0
70551-26	MRI - brain (PC)	177.68	106.79	-66.4
93000	EKG with interp. and report	40.90	37.14	-10.1
99213	Established patient, office visit, 15 minutes	38.60	46.43	16.9
<b>PAYER 2 -- Indemnity</b>				
17100	Destruction of benign facial lesion	45.98	47.55	3.3
29881	Knee arthroscopy with meniscectomy	1,795.23	1,053.55	-70.4
33512	CABG, 3 vessels	5,456.73	3,383.88	-61.3
45378	Diagnostic colonoscopy	626.29	421.92	-48.4
47605	Cholecystectomy	1,590.42	1,098.10	-44.8
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	2,316.21	1,853.53	-25.0
70551	MRI - brain (global)	781.60	697.20	-12.1
70551-26	MRI - brain (PC)	196.82	115.12	-71.0
93000	EKG with interp. and report	49.75	40.04	-24.3
99213	Established patient, office visit, 15 minutes	44.24	50.05	11.6



Table II.7 (continued)

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CPT-4 Code and Payer		Current Payment	New Payment	Percentage Change
<b>PAYER 3 -- All Claims</b>				
17100	Destruction of benign facial lesion	42.04	50.09	19.1
29881	Knee arthroscopy with meniscectomy	1,659.46	1,109.97	-33.1
33512	CABG, 3 vessels	3,619.99	3,565.07	-1.5
45378	Diagnostic colonoscopy	570.89	444.51	-22.1
47605	Cholecystectomy	1,208.43	1,156.90	-4.3
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	1,882.63	1,952.59	3.7
70551	MRI - brain (global)	736.19	734.53	-0.2
70551-26	MRI - brain (PC)	341.74	121.28	-64.5
93000	EKG with interp. and report	44.82	42.18	-5.9
99213	Established patient, office visit, 15 minutes	39.97	52.73	31.9
<b>HIAA</b>				
17100	Destruction of benign facial lesion	55.20	54.19	-1.8
29881	Knee arthroscopy with meniscectomy	2,064.96	1,200.69	-41.9
33512	CABG, 3 vessels	5,499.76	3,856.47	-29.9
45378	Diagnostic colonoscopy	647.57	480.85	-25.8
47605	Cholecystectomy	1,649.38	1,251.46	-24.1
59400	Total obstetrical care (vaginal delivery, ante- and postpartum care)	2,160.93	2,112.19	-2.3
70551	MRI - brain (global)	931.50	794.57	-14.7
70551-26	MRI - brain (PC)	216.04	131.19	-39.3
93000	EKG with interp. and report	55.49	45.63	-17.8
99213	Established patient, office visit, 15 minutes	42.58	57.04	34.0





percent reductions across payers. This probably reflects the fact that this "procedure" is actually a composite of both E&M (antepartum and postpartum visits) and procedure services. Whatever the reason, these results suggest that the payment for this important service would not be greatly reduced, on average, as a result of movement to a Medicare RVS. The possibility of the Medicare RVS resulting in lower obstetrical fees, has been raised as a major concern about using Medicare's RVS for all payers.

Second, global payments for imaging services are reduced by much less than payments for the professional component alone. Payments for an MRI of the brain (CPT 70551) are used as an example of this result. The Payer 2 indemnity payment for the professional component of this service would fall by over 71 percent, while the global fee would drop by only 12 percent. This differential impact is due to the reliance on charge data to develop the technical RVUs (for malpractice and practice expense RVUs) included in the global payment. These technical RVUs somewhat offset the substantial reduction in payments for work.

## **E. STATE-LEVEL RESULTS**

The national results presented in Tables 5, 6 and 7 are driven by the Medicare RVS effect of lowering payments for procedures and raising them for evaluation and management services. However, if there is interest in using this approach to develop a national payment system that could be used by some or all states, then there needs to be some analysis of the potential geographic impact of such an approach. Specifically, how would a state's payment rates be changed if each state set rates based on a conversion factor that, say, was the result of adjusting the national conversion factor for geographic differences in practice costs? Medicare adopted an approach like this when it implemented its fee schedule and projected that there would be large changes in





payments across states (FR, 11/25/91; p 59619). Medicare bases its geographic adjuster on payment localities, areas that are not defined consistently across the country. Sometimes localities are entire states, but often are substate regions, individual counties, or aggregations of counties. However, for the purpose of the state-level analysis in this report, we use the state as the basis for the geographic cost adjusters.

The results presented below are based on two distinct calculations. First, we apply the formula for the RNCF to all claims within each state, by payer. This gives us a separate state-specific, revenue-neutral conversion factor for each payer that can be used for all services. We have chosen to focus on a single all services conversion factor as opposed to developing CFs by type of service so as to avoid potential instability resulting from relying on low numbers of claims for some payers and states. We omitted six states from the Payer 1 data and 20 states from the Payer 2 data because insufficient data were available to reliably distinguish between PPO and indemnity payments. Omitted states are demarcated with an '\*' in the tables. Second, we derive GAF-adjusted national conversion factors for each state by multiplying the national payer-specific conversion factors for All Services (shown in Table II.5) by a geographic adjustment factor (GAF) based on the GPCIs used in the 1995 Medicare Fee Schedule. The main difference between the GAF used in the MFS and the one here is that we include the full-work GPCI in the calculation as opposed to the quarter-work GPCI. We use the full-work GPCI because it is a better overall indicator of physician work cost differences and because there is no reason to assume that the same motivations that resulted in the quarter-work GPCI for Medicare would be present in an all-payer payment policy. The difference between the state-specific, revenue-neutral CF and the cost-adjusted national CF provides an indication of how payments might change across states.



State-specific CFs are presented for each payer in the first column of Tables II.8A through II.8F. The remaining columns in these tables show the GAF, the GAF-adjusted national CFs, and the simulated impact on average payment rates. For all payers, the revenue-neutral CFs vary widely across states. Using PPO data for Payer 1, for example, we find that the state-specific CFs range from a low of \$38.91 (Nebraska) to a high of \$53.19 (Alaska). This is typical of the extent of variation for other payers as well. However the highest state-specific CF we observe occurs in the Payer 1 indemnity data for New York (\$74.75).

This wide variation in the state-specific CFs would not necessarily imply large redistributions across states if the GAFs also exhibited a similar dispersion. However, that is not the case. As was true for Medicare, the GAFs vary across areas less than payments. This suggests that areas with high or low CFs relative to their GAFs would experience large changes in payments. The details of these average payment effects when state-specific conversion factors are compared to a GAF-adjusted national model are shown in last column of Table II.8A through II.8F. A summary of these results is contained in Table II.9.

It appears that larger shifts across states would occur for payers currently receiving discounts relative to charges, i.e., Payer 1 and Payer 2 PPO data, than for other payers. Within the Payer 1 data, payment rates in 27 states would change by more than 5 percent. Of these 27 states, 17 would change by more than 10 percent. By contrast, indemnity payment rates for Payer 1 would change by more than 10 percent in only 3 states and by less than 5 percent in 27 states. This suggests that payments that are more similar to charges tend to track variations in practice costs more closely than discounted payments. It may be that charge differentials are initially similar to practice cost differences, but that discounted payments begin to deviate as a result of variations in state health care markets. The ability of a payer to influence payments may be due to such factors as its market



TABLE II.8A

**State-Level Revenue Neutral Conversion Factors  
For Payer 1-PPO  
(All Services Conversion Factor=\$44.31)**

State	All Services	GAF	GAF ADJUSTED RNCF	Percentage Change
Alabama	42.28	0.90	40.21	-4.89
Alaska	53.19	1.23	54.96	3.32
Arizona	42.02	0.98	43.79	4.20
Arkansas	42.68	0.81	36.19	-15.20
California	49.34	1.11	49.59	0.52
Colorado	42.38	0.94	42.00	-0.90
Connecticut	53.68	1.18	52.72	-1.78
Delaware	46.66	1.04	46.47	-0.41
Dist. of Columbia	54.71	1.25	55.85	2.08
Florida	46.08	1.00	44.68	-3.04
Georgia	47.67	0.94	42.00	-11.90
Hawaii	52.53	1.08	48.25	-8.14
Idaho	47.86	0.84	37.53	-21.58
Illinois	43.38	1.01	45.13	4.03
Indiana	39.99	0.89	39.77	-0.56
Iowa	42.75	0.84	37.53	-12.21
Kansas	43.95	0.88	39.32	-10.54
Kentucky	39.64	0.87	38.87	-1.94
Louisiana	*	*	*	*
Maine	45.70	0.91	40.66	-11.03
Maryland	51.45	1.07	47.81	-7.08
Massachusetts	44.86	1.11	49.59	10.55
Michigan	40.58	1.11	49.59	22.21
Minnesota	40.88	0.94	42.00	2.74
Mississippi	*	*	*	*
Missouri	42.96	0.91	40.66	-5.36
Montana	*	*	*	*
Nebraska	38.91	0.81	36.19	-6.99
Nevada	49.67	1.02	45.57	-8.25
New Hampshire	45.31	0.98	43.79	-3.36
New Jersey	44.99	1.16	51.83	15.20
New Mexico	50.35	0.89	39.77	-21.02
New York	52.86	1.19	53.17	0.58
North Carolina	46.45	0.87	38.87	-16.32
North Dakota	49.91	0.81	36.19	-27.49
Ohio	43.18	0.96	42.89	-0.67
Oklahoma	42.15	0.86	38.42	-8.84
Oregon	39.09	0.90	40.21	2.87
Pennsylvania	39.27	0.99	44.23	12.64
Rhode Island	43.02	1.09	48.70	13.21
South Carolina	41.62	0.87	38.87	-6.60
South Dakota	*	*	*	*
Tennessee	42.68	0.88	39.32	-7.88
Texas	46.20	0.93	41.55	-10.06
Utah	40.19	0.89	39.77	-1.06
Vermont	*	*	*	*
Virginia	44.88	0.95	42.45	-5.42
Washington	45.93	0.96	42.89	-6.61
West Virginia	46.14	0.86	38.42	-16.72
Wisconsin	48.25	0.93	41.55	-13.88
Wyoming	*	*	*	*

Note: \* Insufficient data were available to reliably distinguish PPO and indemnity payments





TABLE II.8B

**State-Level Revenue Neutral Conversion Factors  
For Payer 1-Indemnity  
(All Services Conversion Factor=\$58.66)**

State	All Services	GAF	GAF ADJUSTED RNCF	Percentage Change
Alabama	54.13	0.90	52.61	-2.82
Alaska	67.25	1.23	71.89	6.90
Arizona	56.99	0.98	57.28	0.51
Arkansas	52.53	0.81	47.34	-9.87
California	65.49	1.11	64.88	-0.93
Colorado	53.92	0.94	54.94	1.90
Connecticut	65.56	1.18	68.97	5.20
Delaware	65.09	1.04	60.79	-6.61
Dist. of Columbia	71.30	1.25	73.06	2.47
Florida	59.36	1.00	58.45	-1.53
Georgia	59.80	0.94	54.94	-8.12
Hawaii	63.48	1.08	63.13	-0.56
Idaho	51.15	0.84	49.10	-4.01
Illinois	59.64	1.01	59.03	-1.02
Indiana	54.92	0.89	52.02	-5.28
Iowa	49.61	0.84	49.10	-1.03
Kansas	51.34	0.88	51.44	0.19
Kentucky	51.32	0.87	50.85	-0.91
Louisiana	*	*	*	*
Maine	52.82	0.91	53.19	0.70
Maryland	64.61	1.07	62.54	-3.20
Massachusetts	62.88	1.11	64.88	3.18
Michigan	53.20	1.11	64.88	21.95
Minnesota	56.36	0.94	54.94	-2.51
Mississippi	*	*	*	*
Missouri	54.05	0.91	53.19	-1.59
Montana	*	*	*	*
Nebraska	46.41	0.81	47.34	2.01
Nevada	61.29	1.02	59.62	-2.73
New Hampshire	56.97	0.98	57.28	0.55
New Jersey	64.03	1.16	67.80	5.89
New Mexico	52.76	0.89	52.02	-1.40
New York	74.75	1.19	69.56	-6.95
North Carolina	55.94	0.87	50.85	-9.10
North Dakota	53.65	0.81	47.34	-11.75
Ohio	55.71	0.96	56.11	0.72
Oklahoma	52.46	0.86	50.27	-4.18
Oregon	52.26	0.90	52.61	0.66
Pennsylvania	59.69	0.99	57.87	-3.06
Rhode Island	59.67	1.09	63.71	6.77
South Carolina	51.42	0.87	50.85	-1.11
South Dakota	*	*	*	*
Tennessee	54.07	0.88	51.44	-4.87
Texas	58.46	0.93	54.36	-7.02
Utah	46.96	0.89	52.02	10.78
Vermont	*	*	*	*
Virginia	56.03	0.95	55.53	-0.90
Washington	57.48	0.96	56.11	-2.38
West Virginia	55.38	0.86	50.27	-9.23
Wisconsin	57.08	0.93	54.36	-4.77
Wyoming	*	*	*	*

Note: \* Insufficient data were available to reliably distinguish PPO and indemnity payments.





TABLE II.8C

**State-Level Revenue Neutral Conversion Factors  
For Payer 2-PPO  
(All Services Conversion Factor=\$46.43)**

State	All Services	GAF	GAF ADJUSTED RNCf	Percentage Change
Alabama	42.59	0.90	42.76	0.40
Alaska	61.26	1.23	58.44	-4.61
Arizona	35.42	0.98	46.56	31.45
Arkansas	44.50	0.81	38.48	-13.52
California	*	*	*	*
Colorado	48.03	0.94	44.66	-7.02
Connecticut	46.10	1.18	56.06	21.61
Delaware	*	*	*	*
Dist. of Columbia	56.41	1.25	59.39	5.28
Florida	37.90	1.00	47.51	25.36
Georgia	49.66	0.94	44.66	-10.07
Hawaii	*	*	*	*
Idaho	46.52	0.84	39.91	-14.21
Illinois	*	*	*	*
Indiana	47.49	0.89	42.28	-10.96
Iowa	40.69	0.84	39.91	-1.92
Kansas	*	*	*	*
Kentucky	39.24	0.87	41.33	5.34
Louisiana	*	*	*	*
Maine	40.17	0.91	43.23	7.63
Maryland	49.34	1.07	50.84	3.03
Massachusetts	*	*	*	*
Michigan	36.41	1.11	52.74	44.84
Minnesota	35.92	0.94	44.66	24.33
Mississippi	*	*	*	*
Missouri	41.31	0.91	43.23	4.66
Montana	*	*	*	*
Nebraska	41.05	0.81	38.48	-6.25
Nevada	*	*	*	*
New Hampshire	*	*	*	*
New Jersey	51.25	1.16	55.11	7.53
New Mexico	40.84	0.89	42.28	3.54
New York	51.20	1.19	56.54	10.42
North Carolina	*	*	*	*
North Dakota	43.21	0.81	38.48	-10.94
Ohio	37.87	0.96	45.61	20.44
Oklahoma	44.85	0.86	40.86	-8.90
Oregon	39.18	0.90	42.76	9.13
Pennsylvania	*	*	*	*
Rhode Island	*	*	*	*
South Carolina	41.91	0.87	41.33	-1.38
South Dakota	*	*	*	*
Tennessee	*	*	*	*
Texas	50.67	0.93	44.18	-12.80
Utah	*	*	*	*
Vermont	*	*	*	*
Virginia	46.91	0.95	45.13	-3.78
Washington	40.70	0.96	45.61	12.06
West Virginia	*	*	*	*
Wisconsin	55.07	0.93	44.18	-19.49
Wyoming	*	*	*	*

Note: \* Insufficient data were available to reliably distinguish PPO and indemnity payments.



TABLE II.8F

**State-Level Revenue Neutral Conversion Factors  
For HIAA Charge Data  
(All Services Conversion Factor=\$58.09)**

State	All Services	GAF	GAF ADJUSTED RNCF	Percentage Change
Alabama	54.00	0.90	52.28	-3.18
Alaska	59.25	1.23	71.45	20.59
Arizona	55.80	0.98	56.93	2.02
Arkansas	52.06	0.81	47.05	-9.62
California	61.64	1.11	64.48	4.61
Colorado	52.56	0.94	54.60	3.89
Connecticut	60.21	1.18	68.55	13.85
Delaware	64.40	1.04	60.41	-6.19
Dist. of Columbia	68.80	1.25	72.61	5.54
Florida	58.86	1.00	58.09	-1.31
Georgia	60.02	0.94	54.60	-9.02
Hawaii	62.82	1.08	62.74	-0.13
Idaho	47.92	0.84	48.80	1.83
Illinois	58.78	1.01	58.67	-0.19
Indiana	53.04	0.89	51.70	-2.53
Iowa	49.34	0.84	48.80	-1.10
Kansas	51.46	0.88	51.12	-0.66
Kentucky	51.26	0.87	50.54	-1.41
Louisiana	55.32	0.91	52.86	-4.40
Maine	52.28	0.91	52.86	1.11
Maryland	64.61	1.07	62.16	-3.80
Massachusetts	57.68	1.11	64.48	11.79
Michigan	50.03	1.11	64.48	28.88
Minnesota	52.86	0.94	54.60	3.30
Mississippi	48.38	0.83	48.21	-0.30
Missouri	53.30	0.91	52.86	-0.82
Montana	47.62	0.83	48.21	1.20
Nebraska	44.60	0.81	47.05	5.50
Nevada	60.78	1.02	59.25	-2.51
New Hampshire	55.61	0.98	56.93	2.37
New Jersey	64.70	1.16	67.38	4.15
New Mexico	51.73	0.89	51.70	-0.06
New York	68.88	1.19	69.13	0.36
North Carolina	55.76	0.87	50.54	-9.36
North Dakota	55.63	0.81	47.05	-15.42
Ohio	53.98	0.96	55.77	3.31
Oklahoma	52.79	0.86	49.96	-5.37
Oregon	49.87	0.90	52.28	4.83
Pennsylvania	64.44	0.99	57.51	-10.76
Rhode Island	66.85	1.09	63.32	-5.28
South Carolina	53.78	0.87	50.54	-6.03
South Dakota	48.46	0.77	44.73	-7.70
Tennessee	53.31	0.88	51.12	-4.11
Texas	56.87	0.93	54.02	-5.00
Utah	45.14	0.89	51.70	14.53
Vermont	51.09	0.91	52.86	3.50
Virginia	56.86	0.95	55.19	-2.94
Washington	54.14	0.96	55.77	3.00
West Virginia	53.82	0.86	49.96	-7.18
Wisconsin	55.25	0.93	54.02	-2.22
Wyoming	48.37	0.87	50.54	4.5



TABLE II.8D

**State-Level Revenue Neutral Conversion Factors  
For Payer 2-Indemnity  
(All Services Conversion Factor=\$50.05)**

State	All Services	GAF	GAF ADJUSTED RNCF	Percentage Change
Alabama	45.50	0.90	42.46	-6.68
Alaska	62.04	1.23	58.03	-6.46
Arizona	43.32	0.98	46.24	6.73
Arkansas	45.69	0.81	38.22	-16.36
California	*	*	*	*
Colorado	48.04	0.94	44.35	-7.68
Connecticut	60.07	1.18	55.67	-7.32
Delaware	*	*	*	*
Dist. of Columbia	57.25	1.25	58.98	3.02
Florida	46.03	1.00	47.18	2.50
Georgia	56.42	0.94	44.35	-21.39
Hawaii	*	*	*	*
Idaho	49.17	0.84	39.63	-19.40
Illinois	*	*	*	*
Indiana	47.72	0.89	41.99	-12.01
Iowa	42.93	0.84	39.63	-7.68
Kansas	*	*	*	*
Kentucky	44.10	0.87	41.05	-6.92
Louisiana	*	*	*	*
Maine	46.44	0.91	42.93	-7.55
Maryland	54.07	1.07	50.48	-6.63
Massachusetts	*	*	*	*
Michigan	36.48	1.11	52.37	43.56
Minnesota	39.38	0.94	44.35	12.62
Mississippi	*	*	*	*
Missouri	43.46	0.91	42.93	-1.21
Montana	*	*	*	*
Nebraska	41.69	0.81	38.22	-8.33
Nevada	*	*	*	*
New Hampshire	*	*	*	*
New Jersey	62.88	1.16	54.73	-12.96
New Mexico	41.17	0.89	41.99	1.99
New York	65.67	1.19	56.14	-14.51
North Carolina	*	*	*	*
North Dakota	45.87	0.81	38.22	-16.69
Ohio	44.89	0.96	45.29	0.90
Oklahoma	46.82	0.86	40.57	-13.34
Oregon	44.06	0.90	42.46	-3.63
Pennsylvania	*	*	*	*
Rhode Island	*	*	*	*
South Carolina	50.39	0.87	41.05	-18.54
South Dakota	*	*	*	*
Tennessee	*	*	*	*
Texas	55.06	0.93	43.88	-20.31
Utah	*	*	*	*
Vermont	*	*	*	*
Virginia	51.14	0.95	44.82	-12.36
Washington	40.94	0.96	45.29	10.63
West Virginia	*	*	*	*
Wisconsin	55.51	0.93	43.88	-20.95
Wyoming	*	*	*	*

Note: \* Insufficient data were available to reliably distinguish PPO and indemnity payments





TABLE II.8E

**State-Level Revenue Neutral Conversion Factors  
For Payer 3-All Claims  
(All Services Conversion Factor=\$52.73)**

<b>State</b>	<b>All Services</b>	<b>GAF</b>	<b>GAF ADJUSTED RNCF</b>	<b>Percentage Change</b>
Alabama	53.75	0.90	47.46	-11.70
Alaska	62.28	1.23	64.86	4.14
Arizona	56.83	0.98	51.68	-9.08
Arkansas	53.12	0.81	42.71	-19.60
California	62.50	1.11	58.53	-6.36
Colorado	45.57	0.94	49.57	8.78
Connecticut	68.29	1.18	62.22	-8.89
Delaware	64.32	1.04	54.84	-14.74
Dist. of Columbia	71.28	1.25	65.91	-7.53
Florida	57.46	1.00	52.73	-8.23
Georgia	61.17	0.94	49.57	-18.97
Hawaii	56.27	1.08	56.95	1.21
Idaho	48.93	0.84	44.29	-9.47
Illinois	57.27	1.01	53.26	-7.01
Indiana	55.34	0.89	46.93	-15.19
Iowa	49.75	0.84	44.29	-10.97
Kansas	52.56	0.88	46.40	-11.71
Kentucky	50.74	0.87	45.88	-9.59
Louisiana	55.79	0.91	47.98	-14.00
Maine	54.05	0.91	47.98	-11.21
Maryland	62.84	1.07	56.42	-10.21
Massachusetts	49.53	1.11	58.53	18.17
Michigan	41.45	1.11	58.53	41.22
Minnesota	58.17	0.94	49.57	-14.79
Mississippi	51.02	0.83	43.77	-14.20
Missouri	50.96	0.91	47.98	-5.84
Montana	51.32	0.83	43.77	-14.70
Nebraska	45.62	0.81	42.71	-6.38
Nevada	64.96	1.02	53.78	-17.20
New Hampshire	56.13	0.98	51.68	-7.93
New Jersey	66.09	1.16	61.17	-7.45
New Mexico	50.55	0.89	46.93	-7.16
New York	61.33	1.19	62.75	2.31
North Carolina	54.48	0.87	45.88	-15.79
North Dakota	55.13	0.81	42.71	-22.53
Ohio	53.28	0.96	50.62	-4.99
Oklahoma	52.11	0.86	45.35	-12.98
Oregon	49.68	0.90	47.46	-4.47
Pennsylvania	54.96	0.99	52.20	-5.01
Rhode Island	62.83	1.09	57.48	-8.53
South Carolina	50.69	0.87	45.88	-9.50
South Dakota	49.51	0.77	40.60	-18.00
Tennessee	52.63	0.88	46.40	-11.83
Texas	55.06	0.93	49.04	-10.93
Utah	46.32	0.89	46.93	1.31
Vermont	52.57	0.91	47.98	-8.70
Virginia	53.65	0.95	50.09	-6.63
Washington	46.68	0.96	50.62	8.44
West Virginia	53.74	0.86	45.35	-15.61
Wisconsin	55.26	0.93	49.04	-11.25
Wyoming	47.04	0.87	45.88	-2.5



share, the types of other payers, and provider supply. For example, a payer without an exceptionally high market share may still be able to influence payments if the larger payers are actively forming PPOs and seeking discounts.

## F. DISCUSSION

This study shows that many of the same perceived payment inequities that motivated Medicare to adopt RVS are also present in private payment systems. In particular, payments per RVU for procedures are most generous and E&M services least generous among the payers used for this study. Among procedures, endoscopies have the highest payment rate per RVU. So long as a single conversion factor is used, all payers moving to a Medicare RVS can expect redistributions in payments across services and physician specialties comparable to those being experienced by Medicare. This probably means that private payers moving onto a Medicare RVS would employ some sort of transition period during which fees are gradually raised or lowered to Medicare RVS levels. In order to minimize the initial extent of redistribution, some payers already using the Medicare RVS are allowing for specialty-specific CFs or CFs that vary across service categories.<sup>15</sup> Another possibility would be to follow the Medicare transition in which fees that were initially more than 15 percent away from their Medicare RVS payment levels are gradually being reduced over a five-year period.

These results also highlight a number of important issues that policymakers who favor requiring use of the Medicare RVS by private payers would have to address. The most central one relates to what "all-payer" would actually mean. Would it mean that all payers would need to base payments on the Medicare RVS as a way of facilitating price comparisons by consumers? In this

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<sup>15</sup>It is unclear at this time if or how payers plan to move these systems with multiple CFs toward one with a single CF.



case, some of the large differences between Medicare and private payers and among private payers could remain. Or, would "all-payer" mean that there would be a single CF (adjusted by a geographic practice cost index) to apply to the Medicare RVS that all payers would be required to use? This approach would lead to large reductions in price variation, forcing some payers to increase their fees (e.g., Medicare, Medicaid, and private payers with discounts) and allowing others to pay substantially less (e.g., commercial indemnity plans).

If CFs were allowed to vary by payer, the data required to start and monitor the payment system would be far less than if a rate-setting authority were to establish a single CF. Setting a single, revenue-neutral CF with the same degree of credibility as the Medicare CF would not be feasible given the present data systems. Rate setters would be forced to extrapolate from partial data to all payers or undertake a significant data collection effort to obtain actual charge and service volume data from all private payers. In addition, given the potentially large redistribution in revenues, physicians would demand that policymakers justify the use of a single CF. Arguments for removing payment differentials that may currently exist as a result of perceived differences in provider experience, training, and convenience would have to be made. Rate setters might be put in the difficult position of defending a market with no price variation or developing adjusters for specific factors that might be recognized. However, using adjusters for, say, a physician's experience performing a particular procedure immediately moves the system away from a single CF.

Assuming some acceptable approach to setting the single "all-payer" CF could be worked out, transitional issues then arise. Presently, there appear to be at least two classes of payers in the fee-for-service market - one paying near full charges and one paying at a substantial discount. In designing a transition to a single CF, policymakers would have to decide what role, if any, these payment differentials would play. One approach would be to use the "all-payer" CF as a upper





bound on payments rates and allow payers and providers to negotiate as they have in the present system. This suggests that a CF based on indemnity payments or charges might be acceptable. Another option would be to set the CF at the average for all payers. Of course, this could force discounted payers to give up the price advantages they have achieved on their own initiative. Alternatively, policymakers might decide to set fees at discounted levels. This would mean that the structure of the transition would be more important to the more generous payers and, in particular, physicians treating patients covered by these plans. For example, a thoracic surgeon treating a large number of patients insured by commercial indemnity plans would experience dramatic reductions in revenue if he or she was forced to accept fees based on the Medicare RVS with a CF set at a level consistent with, for example, Blues plans.

Some of the complexities associated with movement to all-payer Medicare RVS with a single CF could be minimized if payers and providers were not locked in to using the same CF in all circumstances. This could downplay the importance of the CF by making it more like a guide to payments levels as opposed to a rigid standard. Payment systems in which either discounting below the CF (see above) or balance billing above the CF could be permitted. The latter option may be particularly important to providers, because reductions in payment rates could be offset up by direct payments from patients. The ability to balance bill, of course, would depend on each patient's willingness and ability to pay and the degree of competition among physicians for patients. To protect patients from unexpected balance billing rules could be established requiring physicians to make patients aware of their balance billing intentions before a service was provided. Physicians in less competitive and higher income markets might be in a better position to balance bill. However, the extent of balance billing and the total payment received for a given service would be the result of decisions made by individual patients and physicians.





Ultimately, policymakers will have to decide what role they would want an all-payer system to play. If it is to provide a mechanism for controlling total expenditures for physician services and making patients equally financially attractive to all physicians, then a system with a single CF may be appropriate. However, if the goal is to correct perceived historical inequities in payments and allow health plans and physicians to compete for patients, a system in which balance billing is possible may be acceptable. The results in this study show that just moving all payers onto a Medicare RVS and letting them set payer-specific CFs would lead to substantial changes in payment rates. Efforts to establish a single all-payer CF, while potentially feasible, would lead to broader ramifications for public payers, private payers, physicians, and their patients.



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## **Chapter III**

### **Developing All-Payer Physician Payment Rates for States**



### III. DEVELOPING ALL-PAYER PHYSICIAN PAYMENT RATES FOR STATES<sup>1</sup>

#### A. INTRODUCTION

In the last chapter we investigated how an individual payer's rates would change if they were set using the Medicare Relative Value Scale (RVS) with a single payer-specific revenue-neutral conversion factor. State-specific results were presented separately for four payers, including two PPO and two indemnity payers. However, if there is interest in using the Medicare RVS to develop a single set of all-payer payment rates for each state, then a CF that is based on data from all private payers should be derived. Interest in a single CF that could be applied to all payers of a particular type (e.g., PPO, HMO, or indemnity) could emerge if rate setters concluded that effective cost containment, for example, required strict controls and no price variation within payer types.

Unfortunately, a true all-payer CF could not be achieved currently given that data from all payers are not available, and are not likely to be available in the foreseeable future. Therefore, in this chapter, we examine alternative methods for aggregating the previous chapter's payer-specific results into a single CF for each state. This CF could be viewed as a proxy for a true all-payer CF. The basic issue is how can a single private-payer conversion factor (CF) be estimated when there exist multiple payers in a state?

Setting a single revenue-neutral conversion factor (RNCF) for private payers with the same degree of credibility as the Medicare CF would be difficult given the present data systems. For example, the proprietary nature of some private payers' data might preclude states from obtaining information on every payer's rates. It would therefore be impossible to undertake the

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<sup>1</sup>This chapter was written by Stephen Zuckerman and Diana Verrilli.



types of calculations that HCFA used in developing the CFs that were established at the beginning of the Medicare Fee Schedule transition in 1992. If complete data were available for all private payers in a state, the most straightforward means of computing an all-payer RNCF would be to combine all data sources and follow methods similar to those used by HCFA. This would amount to aggregating payer-specific RNCFs using weights equal to each payer's share of total expenditures for physician services.

However, since data are not available for all payers, we use the data that are available to compute "all-payer" conversion factors by state. In this instance, we base the computations on two PPO and two indemnity payers. These payers are reported in Chapter II as Payer 1-PPO, Payer 1-indemnity, Payer 2-PPO and Payer 2-indemnity. We combine these data to estimate three types of "all-payer" RNCFs: one for PPO payers, one for indemnity payers and one for PPO and indemnity payers combined. In all likelihood, policymakers would have little interest in the combined CFs because they would force PPOs to increase their rates above current "market" levels.

Because the available data do not represent all payers, we explored alternative approaches to aggregating services from the limited number of payers available to generate the three "all-payer" RNCFs. The approaches relied on four different service volume weights (discussed below), each representing a different method of combining the data. While this may not be ideal, it provides a means for gaining some insight into variations in "all-payer" payments across states.



## B. DATA AND METHODS

This chapter relies on the same edited 1993 service-specific data that are used to estimate RNCFs in Chapter II. In addition, we use 1993 data from Medicare's National Claims History System to develop weights for aggregating the private payment rates across services. Although we could also have used Medicaid data for this purpose, the types of Medicaid data that would have been required were not available for all states.

In order to calculate the three "all-payer" RNCFs for each state, we rely generally on the same methods used to compute the payer-specific RNCFs that are presented in Chapter II. The first major difference is that, instead of computing each  $CF_j^i$  and  $\overline{CF}_i$  using payer-specific claims files, we create three "all-payer" claims files: one for PPO claims, one for indemnity claims, and one for PPO and indemnity claims combined. From each of these files, we compute the service-specific average conversion factors ( $\overline{CF}_i$ ) by type of claim and state. These follow from formula 5 appearing on page II-16.

The second major difference between the results presented in this chapter and those in the preceding chapter relate to how the  $\overline{CF}_i$ s are combined into state-specific RNCFs. Namely, how the weights or  $SHRVU_i$  is are derived. The most straightforward approach uses state-specific service weights based on each of the types of claims. This weighting approach might be viewed as the one a state might use if its goals were to develop a private-payer RVS system that was revenue-neutral within the state. The second approach uses service weights that vary by type of claim, but are not state-specific, i.e., are computed from a national perspective. This is consistent with a private-payer RVS system that reflects state-level differences in payment rates, but not





state-level differences in service mix. Such an approach would not necessarily be revenue-neutral within the state.

In addition to these two sets of weights based on the private payer service mix, we also employ weights based on Medicare data. Again, both state-specific and national weights are used. Results based on Medicare weights highlight two issues. First, they show how sensitive the private RNCFs are to the choice of weights. If applying weights external to the actual claims has little impact on the RNCFs, then the RNCFs might be viewed as fairly robust with respect to the weights. However, if the RNCFs change substantially (as one might expect), then it would appear that the private and Medicare service mixes are quite different. Second, using Medicare weights also provides an estimate of the degree to which Medicare's CFs would differ if they were based on the private sector rates reflected by these payers.

### C. RESULTS

Tables III.1 through III.3 present state RNCFs estimated from each type of claims file--PPO, indemnity, and PPO and indemnity claims combined. We present conversion factors for all-services by the type of service volume weight used. There are several similarities in the results across types of claims. First, within each type of claims file, the estimated "all-payer" revenue-neutral conversion factors vary widely across states. Using PPO claims (Table III.1), for example, we find that the RNCFs range from a low of \$36.93 (Rhode Island) to a high of \$64.09 (Alaska). For indemnity claims, the "all-payer" rates range from a low of \$44.06 (Montana) to a high of \$76.41 (New York). This is typical of the extent of variation in the estimated RNCFs for the other claims files as well. The RNCFs for the PPO and indemnity claims combined are always between the PPO and Indemnity claims RNCFs. Since these data represent a combination of two



types of payers, this result is consistent with our findings for the PPO and indemnity RNCFs.

Second, the RNCFs are sensitive to the service volume weights used. In particular, applying Medicare weights to the three types of RNCFs generally increases private conversion factors. For instance, the Minnesota RNCF when weighted by indemnity claims is \$49.53, but increases about 10 percent to \$54.51 when Medicare weights are applied. Similarly, the PPO RNCF for Florida increases about 9 percent when Medicare weights are applied. States that appear to have little difference in their private payer and Medicare service mix (i.e., estimated RNCFs are nearly the same or decline slightly) include PPO claims for the District and Columbia and South Dakota and indemnity claims for New York and New Jersey.

To understand why replacing private payer weights with Medicare weights increases the CFs, we examined differences in the weights across types of service categories. The weights suggest that Medicare's service mix relative to that of private payers is oriented toward those service categories that tend to have the most generous private payer rates. The results shown in the previous chapter (Table II.5) indicate that, for example, among evaluation and management service categories, private payers pay more generously for emergency room visits, hospital visits and consultations than for other types of evaluation and management services. These three evaluation and management categories receive about *twice* as much weight in the Medicare service mix than in the private service mix, causing the Medicare-weighted CFs to be higher.

Similarly, among procedures, the higher-priced service categories for private payers (e.g., endoscopies, major cardiovascular procedures, major orthopedic surgery and eye procedures) receive about *50 percent* more weight in the Medicare service mix than in the private service mix, causing the Medicare-weighted CFs to be higher. It may be that private payers are less concerned



than Medicare about keeping these rates low because these services represent a less prominent portion of their costs.

While the Medicare service mix affects the estimated private payer CFs, the impact of using national versus state service weights tends to be small. For example, in the PPO and indemnity claims combined (Table III.3), the RNCF using state private payer weights for New Jersey is \$59.03 and \$60.48 when national private payer weights are used. Similarly, the RNCF for PPO and indemnity claims combined in Vermont, is \$50.40 when state weights are applied and \$48.38 when national weights are applied. Similar findings are apparent when Medicare state and national service volume weights are used to compute RNCFs. The similarity between the CFs based on national and state service weights shows that variations in service mix across states are not large or, at least, are not oriented toward particular types of services (as in the case with Medicare weights).<sup>2</sup>

#### **D. CONCLUSIONS**

Ideally, if states had complete information on all payers, several sources of data could be combined by simply weighting each payer by its percentage of overall state expenditures for physician services. However, since it is unlikely that most states would be able to obtain complete payment information from all payers in the state, how to select the appropriate weighting approach to combine available data sources is an important issue.

As shown in Tables III.1 through III.3, the RNCFs for three types of claims, are sensitive to the types of weights used. Where the service mix differences (and payment rates) were large

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<sup>2</sup>Since the state-specific CFs are not based on GPCI-adjusted rates, the similarity between the CFs based on state weights and those based on national weights, is not affected by the ability of the GPCI to explain state variation in private payment rates.





between Medicare and the private payers, we found the RNCFs to be quite sensitive to our choice of weight. Selecting appropriate weights would involve considering whether there was a sufficient number of claims from a payer or set of payers to be confident that the mix of services included in the data reflect services typically provided to most beneficiaries and that charges were representative of the market. Further, the payer should not be skewed toward any geographic area (to avoid distortion in service mix). Ultimately, the weights selected would be driven largely by the data sources available and a states reasons for implementing single “all-payer” rates.

It is likely that the availability of limited service volume and payment data would require policymakers to either undertake a large data collection effort or rely on partial data to develop a single RNCF. In this chapter we present an approach that can be used by policymakers to derive single RNCFs when only partial provider payment data exists. As demonstrated in this chapter, if policymakers are interested in moving all payers onto an RVS “all-payer” payment system, service volume weights can be derived that allow policymakers to combine partial payment data in a state.



**Table III.1**  
**State-Level All-Services PPO Revenue Neutral Conversions Factors**  
**for Two Private Payers Using Different Service Volume Weights**

STATE	Type of Weight			
	State PPO Service Volume	National PPO Service Volume	State Medicare Service Volume	National Medicare Service Volume
ALABAMA	42.58	41.54	43.59	42.77
ALASKA	60.97	58.83	64.09	61.50
ARIZONA	37.48	37.53	39.08	38.84
ARKANSAS	44.09	42.81	46.07	45.57
CALIFORNIA	49.08	50.45	52.64	53.15
COLORADO	46.62	45.62	48.61	48.15
CONNECTICUT	47.53	49.05	48.49	49.76
DELAWARE	53.06	47.70	49.24	49.96
DISTRICT OF COLUMBIA	56.34	56.20	56.22	58.45
FLORIDA	39.50	41.84	42.63	43.11
GEORGIA	49.25	48.14	51.08	50.05
HAWAII	48.84	47.97	49.80	51.50
IDAHO	46.53	43.66	47.23	44.99
ILLINOIS	51.04	50.88	53.14	52.59
INDIANA	45.76	44.48	49.74	48.38
IOWA	40.71	40.63	42.74	42.82
KANSAS	43.81	43.41	46.67	45.76
KENTUCKY	39.32	39.92	42.06	41.77
LOUISIANA	50.67	48.79	54.44	52.95
MAINE	40.26	39.67	42.13	41.27
MARYLAND	49.41	49.59	51.80	51.71
MASSACHUSETTS	40.83	40.55	40.66	40.95
MICHIGAN	37.73	38.01	38.27	37.90
MINNESOTA	36.56	39.08	42.33	41.62
MISSISSIPPI	.	.	.	.
MISSOURI	41.72	41.11	43.49	42.63
MONTANA	43.38	42.27	45.90	44.47
NEBRASKA	40.79	39.21	42.53	41.50
NEVADA	52.20	50.11	53.41	53.57
NEW HAMPSHIRE	43.90	44.78	47.24	46.47
NEW JERSEY	50.81	51.77	50.20	53.03
NEW MEXICO	40.88	39.33	41.77	41.78
NEW YORK	51.60	53.19	52.61	54.22
NORTH CAROLINA	48.47	46.51	51.54	50.55
NORTH DAKOTA	43.21	43.16	48.46	47.18
OHIO	40.98	40.38	42.81	42.43
OKLAHOMA	44.58	43.66	47.18	46.44
OREGON	39.17	40.18	42.13	41.73
PENNSYLVANIA	40.69	39.61	41.51	41.55
RHODE ISLAND	37.31	36.93	38.31	37.73
SOUTH CAROLINA	41.89	40.24	42.76	42.07
SOUTH DAKOTA	46.10	45.97	52.93	49.79
TENNESSEE	46.11	45.54	49.14	48.10
TEXAS	48.28	48.40	52.32	52.05
UTAH	40.73	39.54	44.18	42.46
VERMONT	50.28	47.94	51.96	51.87
VIRGINIA	46.78	47.34	50.48	49.94
WASHINGTON	41.42	41.02	41.86	42.02
WEST VIRGINIA	46.91	45.14	48.42	48.17
WISCONSIN	50.84	49.88	54.19	52.47
WYOMING	48.80	45.53	49.64	49.01

\*Insufficient data were available to reliably distinguish PPO and indemnity data.



**Table III.2**  
**State-Level All-Services Indemnity Revenue Neutral Conversions Factors**  
**for Two Private Payers Using Different Service Volume Weights**

STATE	Type of Weight			
	State Indemnity Service Volume	National Indemnity Service Volume	State Medicare Service Volume	National Medicare Service Volume
ALABAMA	\$49.04	\$49.16	\$52.60	\$51.57
ALASKA	65.59	62.86	70.10	67.72
ARIZONA	51.10	50.14	52.33	51.77
ARKANSAS	49.09	47.61	51.96	51.46
CALIFORNIA	62.34	63.57	66.43	67.63
COLORADO	51.72	50.57	53.30	52.86
CONNECTICUT	64.90	64.16	64.43	66.44
DELAWARE	58.20	55.89	60.21	58.21
DISTRICT OF COLUMBIA	59.01	64.56	66.47	67.92
FLORIDA	53.97	54.44	54.78	55.49
GEORGIA	58.28	55.86	59.94	58.77
HAWAII	62.82	60.09	64.77	66.45
IDAHO	50.03	46.40	52.88	50.13
ILLINOIS	56.98	54.83	57.27	56.89
INDIANA	53.33	49.79	56.43	54.74
IOWA	47.37	45.37	48.64	48.75
KANSAS	47.06	48.43	52.77	51.97
KENTUCKY	49.19	47.76	50.80	50.29
LOUISIANA	52.24	49.89	55.92	54.50
MAINE	48.92	45.66	49.72	49.65
MARYLAND	56.08	60.91	64.57	64.31
MASSACHUSETTS	50.46	55.34	55.47	56.59
MICHIGAN	48.78	47.51	48.96	48.97
MINNESOTA	49.53	49.04	54.51	53.05
MISSISSIPPI	*	*	*	*
MISSOURI	50.45	49.29	53.33	52.00
MONTANA	45.44	43.09	48.01	46.12
NEBRASKA	44.44	42.75	46.83	45.91
NEVADA	57.87	55.66	60.44	59.64
NEW HAMPSHIRE	53.63	51.78	55.93	55.89
NEW JERSEY	63.89	64.99	63.54	67.20
NEW MEXICO	44.56	44.06	46.79	46.98
NEW YORK	72.63	75.32	73.60	76.41
NORTH CAROLINA	54.62	51.73	58.28	57.26
NORTH DAKOTA	47.60	45.93	52.42	50.75
OHIO	53.12	50.56	54.33	53.92
OKLAHOMA	49.86	48.69	52.53	51.76
OREGON	48.20	46.72	50.67	49.34
PENNSYLVANIA	56.46	54.89	58.62	59.12
RHODE ISLAND	51.08	50.70	52.49	52.12
SOUTH CAROLINA	51.15	48.84	53.01	52.19
SOUTH DAKOTA	46.30	44.75	52.12	49.70
TENNESSEE	52.86	49.57	53.93	52.82
TEXAS	57.23	54.72	59.39	58.93
UTAH	46.89	44.48	51.08	48.92
VERMONT	50.52	46.89	51.80	52.05
VIRGINIA	52.53	55.64	59.30	58.78
WASHINGTON	49.82	51.03	52.71	52.85
WEST VIRGINIA	52.15	48.87	52.96	52.85
WISCONSIN	56.78	54.62	61.12	59.34
WYOMING	46.50	44.66	49.65	48.58

\*Insufficient data were available to reliably distinguish PPO and indemnity data.





Table III.3  
State-Level All-Services Revenue Neutral Conversions Factors  
for Two Private Payers Using Different Service Volume Weights,  
Indemnity and PPO data combined.

STATE	Type of Weight			
	State Both Service Volume	National Both Service Volume	State Medicare Service Volume	National Medicare Service Volume
ALABAMA	\$43.82	\$42.84	\$44.91	\$44.09
ALASKA	64.83	62.37	69.14	66.41
ARIZONA	43.56	43.38	44.86	44.44
ARKANSAS	47.16	46.06	49.76	49.21
CALIFORNIA	54.67	55.72	57.73	58.44
COLORADO	48.68	47.67	50.48	50.02
CONNECTICUT	61.40	61.90	61.60	63.50
DELAWARE	56.19	53.51	57.18	55.94
DISTRICT OF COLUMBIA	57.85	60.53	60.88	62.65
FLORIDA	44.58	46.32	47.02	47.50
GEORGIA	54.76	53.30	56.82	55.69
HAWAII	56.76	55.75	59.80	60.67
IDAHO	48.83	45.70	50.79	48.14
ILLINOIS	53.96	53.07	55.11	54.66
INDIANA	49.29	47.20	52.78	51.33
IOWA	43.23	42.93	45.25	45.47
KANSAS	44.85	44.75	48.04	47.32
KENTUCKY	45.05	45.01	47.42	47.01
LOUISIANA	51.41	49.51	55.24	53.78
MAINE	45.65	44.29	47.24	46.66
MARYLAND	51.94	53.43	55.78	55.80
MASSACHUSETTS	45.26	47.38	47.10	47.83
MICHIGAN	44.88	44.46	45.13	45.08
MINNESOTA	42.71	44.39	49.01	47.64
MISSISSIPPI	47.32	45.09	48.32	47.50
MISSOURI	45.15	44.44	47.08	46.06
MONTANA	44.28	42.59	46.85	45.06
NEBRASKA	42.55	41.27	44.82	43.87
NEVADA	54.97	53.03	56.83	56.57
NEW HAMPSHIRE	46.26	46.84	49.73	49.14
NEW JERSEY	59.03	60.48	58.36	61.32
NEW MEXICO	42.81	41.85	44.36	44.59
NEW YORK	69.75	72.85	70.41	72.88
NORTH CAROLINA	51.72	49.54	54.96	53.92
NORTH DAKOTA	45.75	45.11	51.22	49.53
OHIO	47.81	46.37	49.32	48.92
OKLAHOMA	46.22	45.32	48.71	47.95
OREGON	43.88	44.04	46.89	45.92
PENNSYLVANIA	47.20	46.22	47.86	48.28
RHODE ISLAND	40.46	41.36	42.33	42.15
SOUTH CAROLINA	46.70	45.09	48.10	47.42
SOUTH DAKOTA	46.14	45.72	52.78	49.89
TENNESSEE	48.77	47.42	51.16	50.14
TEXAS	53.31	52.11	56.50	56.14
UTAH	44.35	42.98	48.36	46.37
VERMONT	50.40	48.38	53.18	52.97
VIRGINIA	48.81	50.08	53.17	52.69
WASHINGTON	45.20	45.27	45.94	46.12
WEST VIRGINIA	49.58	47.32	50.78	50.62
WISCONSIN	55.26	53.80	59.41	57.61
WYOMING	47.66	45.36	50.18	49.09





## **Chapter IV**

### **Preferred Provider Organizations and Physician Fees**



## **IV. PREFERRED PROVIDER ORGANIZATIONS AND PHYSICIAN FEES<sup>1</sup>**

### **A. INTRODUCTION**

One of the most significant changes in the health care delivery system in the past decade has been the movement away from traditional fee-for-service insurance to managed care arrangements. This has been largely driven by payers' demands for cost control and a growing provider surplus. Payers are becoming more discriminating consumers, searching for low cost providers and using market power to negotiate discounted prices. Spurred by a need to maintain patient volume, physicians are increasingly accepting discounted payments.

Among the broad range of managed care arrangements that are evolving, Preferred Provider Organizations (PPOs) represent one of the fastest growing alternatives to fee-for-service or traditional health insurance. In PPOs, an insurer or other third- party payer contracts with selected physicians, hospitals and other providers to deliver services at discounted rates. Since financial incentives are provided for enrollees to use these preferred providers, providers are willing to accept discounted fees in exchange for the expectation that their patient volume will increase or, at least, be maintained. PPOs are an attractive type of managed care arrangement because they offer something for everyone. The payer hopes to control costs through discounted fees and utilization management controls. Enrollees save money by choosing a contracted provider, although they are free to go to other providers. Providers can potentially increase their patient loads by agreeing to discounted fees and forms of utilization review, while often avoiding capitated payments.

Contracting with a panel of providers for health care services, which occurs in PPOs, is

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<sup>1</sup>This chapter was written by Diana Verrilli and Stephen Zuckerman.



not entirely new. In fact, the Blue Cross and Blue Shield insurance plans' participating provider program rests on a variant of PPO contracting. However, only recently has the notion of selective contracting been used extensively as a cost-containment device. The recent growth in PPOs has been remarkable. Over a decade ago, PPOs played almost no role in the health insurance market. According to one source, in 1981 fewer than 10 PPOs had contracts to serve enrollees (Barger, 1985). By 1987, that number increased to over 100 plans (AAPPO, 1995). In 1994, there were over 700 plans. Similarly, the number of people enrolled in PPOs has also increased from an estimated 10.4 percent of individuals with private insurance in 1988 to 43.0 percent in 1993 (EBRI, 1995). Physician participation in PPOs mirror these enrollment trends- increasing from 45 percent in 1988 to 64 percent in 1993 (American Medical Association, 1994). Overall, physicians receive about one-fifth of their revenue from PPO arrangements.

According to a recent study of 30 PPO plans, the predominant payment method for providers was fee-for-service<sup>2</sup> (Gold, 1995). In fact, none of the PPOs surveyed used capitation as a basic form of physician reimbursement. Although this study investigated provider payment methods, it did not address the level of discount payers are able to obtain from panels of preferred providers relative to what they pay for indemnity claims. The larger the size of the PPO discount the payer achieves, the greater is the payer's ability to control health plan costs.

PPO discounting is not merely a private sector issue. It may also play an important role in payment decisions among public payers. Historically, policymakers have been concerned that relatively low public fees in comparison to private payers could create access problems for

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<sup>2</sup>These fee-for-service arrangements typically did not include provisions for withholds or bonuses which are often used to provide physicians with financial incentives to use services more efficiently.





beneficiaries. Their concerns, for example, have led to annual tracking of the relationship between Medicare and private fees by the Physician Payment Review Commission (PPRC). Their findings suggest that Medicare fees have been, on average, between 30 and 40 percent below private fees for most of the 1990s (PPRC, 1995). However, it has been argued that, by relying on very little data from managed care plans, PPRC's results are misleading and the "in many instances, Medicare has started paying more to doctors than private payers do (Miller, 1995)." This conclusion, though, appears to be based on fee data from a limited number of services and geographic areas.

If Medicare fees were, in fact, becoming more generous relative to private payers, then this could allow public payers to save money by lowering their fees without a great risk of impeding access. Alternatively, if generous private fees had been providing cross-subsidies for public (and uninsured) patients, discounting could pressure public payers to raise their fees under certain circumstances. For example, lower private payments brought about by market forces could threaten some essential providers' financial viability, causing public payers to respond by providing additional sources of revenue (e.g., a higher Medicare bonus in personnel shortage areas). Although it is not possible to predict how private discounting will affect public payers' decisions, it is important to understand how the growth in privately-discounted fees may be changing the relationship between public and private payments.

In this chapter, we measure PPO discounts achieved by two large private payers in 1993. For the two payers, we consider these discounts from a national perspective and explore how discounts vary across types of physician services. In addition, we contrast the discounted PPO rates with Medicare fees during the study year. Although these private payers may not be



representative of all private payers, they are large and national in scope and, as such, provide a reasonable basis for making comparisons to Medicare. In the section that follows, we describe the data available to this study and outline our methods. We then present our findings and conclude with a discussion of the potential implications of these results.

## **B. DATA AND METHODS**

**Data Sources.** This analysis relies on data from Medicare's National Claims History and two private sector third-party payers. These private sector payers include two large national insurers, one covering 4.5 million lives.<sup>3</sup> Both payers operate PPO and indemnity plans in all 50 states and the District of Columbia and provided data from all geographic areas. Due to data use agreements, neither payer providing data can be identified by name. Therefore, the data sources are referred to as Payer 1 and Payer 2. We recognize that data from two payers are not generalizable to all private payers. However, these payers were willing to cooperate and provide data that is rarely available publicly; other payers we contacted were not receptive to the idea. Moreover, the insurer covering 4.5 million lives may also apply the same payment rules to many other health plans across the country. Therefore, the payments derived from this payer are likely to reflect a larger share of the private market than is represented in the claims available for us to analyze. It would require arbitrary assumptions however, to estimate the market share of either payer in this study.

Table IV.1 provides a summary of the private payer data used in the analysis. The claims experience represented in Payer 1 reflects three months of data from 1993 while Payer 2

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<sup>3</sup>The other insurer would not provide data on a number of covered lives.



**Table IV.1**

**Characteristics of Private Payer Data Sources, 1993**

Payer	Months of Data	Total Physician Services (millions)	Total Payments (\$ millions)
Payer 1	PPO	3.8	\$195.8
	Indemnity	11.3	771.2
	PPO	13.6	812.3
Payer 2	Indemnity	5.8	377.5

Source: Urban Institute analysis of 1993 claims from two large private payers.



represents the entire year's data. Because we are primarily interested in estimating average payment rates and discounts, there is a sufficient amount of data in three months of claims experience to produce reliable estimates. Although Payer 1 data represents a much shorter time period than Payer 2, the number of indemnity services reported in these databases are comparable. PPO claims in each dataset are defined by whether the service was rendered by a PPO provider and not by the health plan in which the patient is enrolled. Claims for patients enrolled in PPO plans who receive services by non-PPO providers are considered indemnity services and classified accordingly. There are twice as many PPO services reported in the Payer 2 data. In total, there are over \$950 million in payments for Payer 1 and \$1,100 million in payments for Payer 2.

We reviewed and edited each source of data in order to develop analytic files which consisted of claims for physician services and clinical laboratory services only.<sup>4</sup> This editing involved omitting claims with invalid CPT codes, claims for medical supplies, durable medical equipment and ambulance services, and claims for oncology, dialysis and anesthesia services. In each dataset, about 10-15 percent of the total charges were dropped as a result of this process. It was possible to identify claims for surgical assistants and the professional component of radiology and other services. This is important for expressing payment rates in terms of relative value units (RVUs) (discussed below).

In addition, claims with apparently erroneous payment data in the private and Medicare sources are screened out. The objective was to remove those claims that seemed to have very high or very low average payments and, specifically, eliminate claims for partial payments (i.e.,

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<sup>4</sup>With the exception of anesthesia, oncology and dialysis services all physician services and clinical laboratory tests are included in this analysis.





payments for surgical assistants) that are not adequately identified in the data. The approach we used eliminates all claims that were more than three times or less than one-third of the mean payment for the service.<sup>5</sup> In order to avoid screening out disproportionate numbers of claims from high- or low-cost areas, we first adjust for differences in payments using the Health Care Financing Administration's (HCFA) Geographic Practice Cost Index (GPCI). Overall, outlier claims accounted for only about 2 percent of payments.

In addition, we identified some Medicare services with very low or very high payments per RVU relative to the 1993 fee schedule conversion factors. These services tended to be unusual services within the Medicare program (e.g., newborn care, obstetrical care, and antigen therapy). To address this issue, all national average Medicare payments per RVU that were less than one-third or greater than three times the fee schedule conversion factors were excluded from the computations.

**Methods.** The size of the PPO discount for each payer in this study can be measured as the ratio of the average payment for services paid through the payer's PPO plans to the average payment for services paid through the indemnity plan. Analogously, the payment differential between Medicare and the PPOs equals the ratio of the average Medicare payment to the average PPO payment. To compute these ratios nationally, two issues must be addressed. First, how can payments for different services (e.g., office visits and surgeries) be expressed in terms of consistently-defined units of volume so that they can be combined into summary measures of PPO discounts or Medicare-to- PPO differentials? Second, if our goal is to focus solely on the price

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<sup>5</sup>This approach is commonly used by actuaries at the Health Care Financing Administration and analysts at the Physician Payment Review Commission.



discount, how do we control for differences in the mix of services between PPO, indemnity and Medicare claims when computing the price ratios?

The first issue can be addressed directly by expressing payments for individual services in terms of the number of Relative Value Units (RVUs) contained in the service. Relative Value Units, as defined by the Medicare Relative Value Scale, can be thought of as basic units of service volume that have the same meaning in all physician services.<sup>6</sup> For example, if an office visit contains one RVU and is paid at a rate of \$45, its payment per RVU would be \$45. If an arthroscopy, on the other hand, contains 25 RVUs and is paid at a rate of \$1,500, its payment per RVU would be \$60. By expressing these payments in terms of RVUs, we can combine the payment rates for different services into a weighted average payment rate, using the distribution of RVUs across services as the weights.<sup>7</sup> These weighted average payments per RVU can be computed separately for all PPO and indemnity claims, as well as for groups of services within these payment categories, allowing for fairly easy computation of PPO discounts. The average payment per RVU can be computed similarly for Medicare.<sup>8</sup>

The issue of service mix differences between PPO, indemnity and Medicare claims can also be dealt with in a straightforward fashion. The solution relates to the weights used in computing the average payment per RVU when aggregating services. Our basic choice is to use

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<sup>6</sup> For additional information on the process used to assign RVUs to physician services see Zuckerman and Verrilli, 1995.

<sup>7</sup> The reader may note that the payment per RVU for an individual service, computed as described here, is simply the conversion factor that would need to be applied to that service's RVUs to yield the current payment per service.

<sup>8</sup> In 1993, the average Medicare payment per RVU was not simply the published conversion factor for the Medicare Fee Schedule because Medicare was only in the second year of the five-year transition to a system based fully on the Medicare Relative Value Scale.



the PPO shares of RVUs, the indemnity shares of RVUs or the Medicare shares in all instances. Since our goal is to measure the size of the discount the PPO receives relative to the indemnity part of the payer's business, it makes sense to weight all prices by the distribution of indemnity service RVUs. In this way, the discount we compute will tell us how much lower indemnity payments might have been if their prices paid were at PPO levels. Therefore, PPO and indemnity average payments per RVU and the resulting discounts are computed as if the indemnity service mix prevailed within the PPO claims.<sup>9</sup>

Once the indemnity service mix is selected as the basis for computing the PPO discount, it makes sense to be consistent and use it in deriving the Medicare-to-PPO differential. This is done separately for each PPO, since the indemnity service mix varies by payer.<sup>10</sup> When indemnity weights are applied to Medicare payments per RVU, the resulting average payment per RVU can be thought of as the level of payment indemnity plans would have offered if they paid at Medicare rates. The differential then reflects the potential additional savings (beyond the PPO discount) that might have accrued to indemnity plans had they adopted Medicare's rates.<sup>11</sup>

The GPCI adjustment used in the data screening (described above) was performed in order to remove potential distortions resulting from a disproportionate number of claims coming from either high- or low-cost areas. For similar reasons, the GPCI-adjusted payment rates were

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<sup>9</sup>The discount we derive can be viewed as a Laspeyres price index, where the indemnity claims and prices represent the "base" and the PPO prices the "comparison."

<sup>10</sup>The resulting differences in the average Medicare payment per RVU across payers is small. Nevertheless, using the payer-specific service mix is appropriate, in order for the PPO discounts and Medicare-to-PPO differentials to reflect purely price information.

<sup>11</sup>Some of these potential savings to indemnity plans could be offset by volume responses that could occur in response to lower fees.





used in computing national average payments per RVU for all payers.

## **Results**

Table IV.2 presents weighted average payment rates per RVU for each payer's PPO and indemnity plan for All Services and four broad type of service categories. Recall, that the weights used in both the PPO and indemnity calculations represent the service mix of indemnity claims. First, the results show sizeable differences in indemnity payment rates across the two payers. For Payer 1, the average payment per RVU for all indemnity claims is \$58.66, 17.2 percent higher than the average indemnity payment per RVU of \$50.05 for Payer 2. In all services categories indemnity payments for Payer 1 exceed those for Payer 2 (although, for imaging the difference is negligible). Second, as a result of the discounts each payer is able to achieve, PPO payment levels for both payers are fairly close to each other, with average weighted payments per RVU for All Services of about \$46 and \$44, respectively. For these two payers, this new form of managed care seems to result in a reduction in rate differentials across payers. Data from a broader set of payers would be required before more general conclusions can be reached.

Taken together, the indemnity and PPO payment rates show that Payer 1 is able to achieve a higher and more uniform discount across the broad service categories shown than Payer 2. For example, for All Services the discount achieved by Payer 1 is nearly twice the size of the discount achieved by Payer 2 (20.8 percent versus 11.5 percent). Further, the payment discount for Payer 1 varies only slightly by broad type of service category (17.3 percent for imaging services to 22.1 percent for evaluation and management services), while for Payer 2 the level of the discount ranges from 8.0 and 16.0 percent. It may be that because Payer 1 is paying



Table IV.2

Average PPO and Indemnity Payments per RVU for Broad Categories of Physician Services

Type of Service Groups	Payer 1			Payer 2		
	PPO	Indemnity	Discount(%)	PPO	Indemnity	Discount(%)
All Physician Services	\$46.32	\$58.45	20.7	\$44.19	\$49.93	11.5
Evaluation and Management	33.75	43.34	22.1	37.24	40.49	8.1
Procedures	57.42	72.50	20.8	55.27	64.44	14.2
Imaging	55.35	66.96	17.3	57.53	66.86	14.0
Tests	48.19	59.81	19.5	46.25	55.08	16.1

Source: Urban Institute analysis of 1993 claims from two large private payers.



Table IV.3

**Average PPO and Indemnity Payments  
per RVU for Detailed Categories of Physician Services**

TYPE OF SERVICE GROUPS	Payer 1		Payer2		Payer 1 Discount	Payer 2 Discount
	PPO	Indemnity	PPO	Indemnity		
<b>All Physician Services</b>	<b>46.48</b>	<b>58.66</b>	<b>44.29</b>	<b>50.05</b>	<b>20.8%</b>	<b>11.5%</b>
<b>EVALUATION AND MANAGEMENT (E/M)</b>	<b>33.75</b>	<b>43.34</b>	<b>37.24</b>	<b>40.49</b>	<b>22.1</b>	<b>8.0</b>
Office Visits	31.02	42.22	37.49	41.03	26.5	8.6
Hospital Visits	38.40	47.29	39.56	44.80	18.8	11.7
Emergency Room Visits	55.75	61.08	45.31	50.51	8.7	10.3
Nursing Home Visits	30.58	37.44	32.92	33.62	18.3	2.1
Specialist E/M	30.04	35.72	35.55	37.68	15.9	5.7
Consultations	37.57	46.65	39.29	44.15	19.5	11.0
<b>PROCEDURES</b>	<b>57.96</b>	<b>73.23</b>	<b>55.81</b>	<b>65.09</b>	<b>20.9</b>	<b>14.3</b>
Major Procedures - General	59.76	77.21	59.80	72.15	22.6	17.1
Major Procedures - Cardiac	66.98	81.14	61.45	68.78	17.5	10.7
Major Procedures - Orthopedic	65.95	82.71	59.39	69.56	20.3	14.6
Eye Procedures	62.54	74.18	59.12	66.40	15.7	11.0
Ambulatory Procedures	59.94	79.95	54.99	64.31	25.0	14.5
Minor Procedures	46.80	57.15	45.31	51.40	18.1	11.8
Endoscopy	73.18	92.08	67.18	79.57	20.5	15.6
<b>IMAGING SERVICES</b>	<b>55.35</b>	<b>66.96</b>	<b>57.53</b>	<b>66.86</b>	<b>17.3</b>	<b>14.0</b>
Standard Imaging	57.22	68.79	58.76	67.97	16.8	13.6
Advanced Imaging	54.12	62.54	53.03	63.90	13.5	17.0
Echography	50.25	64.56	55.28	63.21	22.2	12.5
Imaging/Procedure	65.65	79.39	69.50	79.26	17.3	12.3
<b>TESTS</b>	<b>48.19</b>	<b>59.81</b>	<b>46.25</b>	<b>55.08</b>	<b>19.4</b>	<b>16.0</b>
Laboratory Tests	47.60	59.51	44.67	54.17	20.0	17.5
Other Tests	49.71	60.58	49.38	56.87	17.9	13.2

Source: Urban Institute analysis of 1993 claims from two large private payers.





substantially more for services among its indemnity claims, it has more room to negotiate larger discounts. However, other factors such as differences in the two payers market shares may also be playing an important role in determining these discounts.

Table IV.3 shows the size of the differentials between PPO payments and indemnity payments for each payer by more detailed type of service categories. To some extent the size of the discount for each payer varies within each of the broad service categories. These varying discounts are most pronounced in the E&M service category. They range from 8.8 percent for emergency visits to 26.5 percent for office visits for Payer 1 and 2.1 percent for nursing home visits to 11.7 percent for hospital visits for Payer 2.

The E&M category also has the greatest difference in discounts between Payer 1 and Payer 2. For example, in the office visit category, Payer 1 is able to achieve a 26.5 percent discount while the discount achieved by Payer 2 is only 8.6 percent. In fact, the PPO discounts for Payer 1 are so large among E&M services that, despite having higher indemnity rates than Payer 2 in all but one of the E&M categories, Payer 1 actually has lower PPO rates than Payer 2 in 5 of the 6 service groups. For example, the average indemnity payment per RVU for office visits is about \$42 for Payer 1 and \$41 for Payer 2, but drops to \$31 and \$37, respectively, among PPO claims. The only E&M service category where the opposite finding is true is emergency room visits where discounts are comparable and average PPO rates for Payer 1 are about 23 percent higher than those for Payer 2.

Payer 1 is also able to negotiate lower PPO rates than Payer 2 in the imaging category. Similar to the E&M category, Payer 1 starts with higher indemnity payments than Payer 2 in three out of the four imaging categories, but achieves larger discounts. For instance, the average





indemnity payment rate for echographies is about \$65 for Payer 1 and \$63 for Payer 2 but drops to \$50 and \$55 for Payers 1 and 2, respectively, as a result of the discounting.

Despite the sizeable PPO discounts achieved by both payers, Table IV.4 shows that PPO rates are still well above those paid by Medicare in 1993. Across all services, on average, 1993 Medicare fees were 35.2 percent and 33.2 percent below the PPO rates of Payer 1 and Payer 2, respectively. These differentials are consistent with those reported by PPRC (1995). Not surprisingly, given that the Medicare Fee Schedule increased payments for E&M services relative to Procedures, the differential between Medicare and PPO rates was lowest for Evaluation and Management services (15.3 and 24.2 percent) and highest for Procedures. With the exception of Evaluation and Management services, the Medicare-to-PPO differential is similar for both payers across service categories. For Evaluation and Management, payments made by Payer 1 are closer to Medicare than are those made by Payer 2.

The results in Table IV.4 provide a general sense of the differences between Medicare and PPO payments. However, because the computations are based on average payments per RVU they do not show how payments for specific services vary across payers. While it would be impractical to include an exhaustive listing of Medicare and PPO prices, we have included national average payments per service for a selected set of services in Table IV.5. Our goal is to offer an alternative, and potentially more tangible, basis for comparing Medicare prices to PPO prices. Within each type of service group, the services shown were selected from among those accounting for the largest shares of spending among the indemnity side of private payers.<sup>12</sup>

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<sup>12</sup>Generally, the Medicare payment rates are very close to those that would have been in effect had the Medicare Fee Schedule been fully phased-in in 1993. Differences seem to be due to the fact that in 1993, Medicare was still in the midst of its five-year transition to payments based fully on relative values. In 1993, the three Evaluation and



Table IV.4

Average Medicare and PPO Payments per RVU for Broad Categories of Physician Services  
By Private Payer

Type of Service Groups	Payer 1			Payer 2		
	Medicare	PPO	Differential(%)	Medicare	PPO	Differential(%)
All Physician Services	\$30.11	\$46.48	35.2	\$29.58	\$44.29	33.2
Evaluation and Management	28.57	33.75	15.3	28.21	37.24	24.2
Procedures	30.93	57.96	46.6	31.18	55.81	44.1
Imaging	32.78	55.35	40.8	33.58	57.53	41.6
Tests	29.79	48.19	38.2	29.94	46.25	35.3

Source: Urban Institute analysis of 1993 claims from the Medicare National Claims History File and two large private payers.



Average Medicare and PPO Payments per Service for Selected Services

Service	Average Payment Per Service			Difference Between Medicare and PPO Payment Rate	
	Medicare	Payer 1	Payer 2	Payer 1	Payer 2
<b>EVALUATION AND MANAGEMENT</b>					
99213 Office or other outpatient evaluation of an established patient, 15 minutes	\$ 30	\$ 32	\$ 39	6.3%	23.1%
99232 Subsequent hospital evaluation of a patient, 25 minutes	40	58	58	31.0	31.0
99244 Office consultation with a new or established patient, 60 minutes	107	131	141	18.3	24.1
<b>PROCEDURES</b>					
45378 Diagnostic colonoscopy	284	583	572	51.3	50.3
92982 Percutaneous transluminal coronary balloon angioplasty (PTCA), single vessel	1,181	2,195	2,061	46.2	42.7
49505 Inguinal hernial repair	376	892	827	57.8	54.5
67228 Destruction of retinal lesion by laser treatment(s)	671	1,042	996	35.6	32.6
<b>IMAGING (includes procedure and interpretation of imaging results)</b>					
71020 Chest X-ray, two views	\$ 31	\$ 54	\$ 53	42.6	41.5
70470 Contrast CAT scan of the head	293	495	454	40.8	35.5
76805 Echography exam of a pregnant uterus	117	164	153	28.7	23.5
70553 Magnetic resonance image of the brain, without contrast material	879	1102	996	20.2	11.7
<b>TESTS (includes procedure and interpretation of test results)</b>					
93015 Cardiovascular stress test	109	198	205	44.9	46.8
94060 Evaluation of wheezing (i.e., bronchospasm evaluation)	51	75	71	32.0	28.2
95904 Sensory nerve conduction study	30	57	50	47.3	40.0





The payments shown in Table IV.5 highlight large variations in the size of the Medicare-to-PPO differential across specific services for these payers. The size of the differential ranges from a low of 6.3 percent (established office visit for Payer 1 PPO) to a high 57.8 percent (inguinal hernia repair for Payer 1 PPO). Within Imaging services, the differentials for a two-view chest X-ray (CPT 71020) and a CAT Scan of the Head (CPT 70470) are very close to the overall differential of approximately 40 percent shown in Table IV.4. However, for the other two Imaging services reported in Table IV.5, the differentials are smaller. In fact, Medicare's payment for an MRI of the Brain (CPT 70553) is only 11.7 percent below the average payment rate of Payer 2's PPO.

### C. DISCUSSION

If PPOs are going to thrive as a form of managed care that is able to control private spending, then they must be able to pay providers at rates well below those in traditional insurance plans. Our results show that the two payers for which we have data were able to establish heavily discounted rates within their PPOs. This suggests that, unless volume responses completely offset these discounts, purchasers covered by these payers' rules should see PPOs as an effective means of lowering their health care spending. However, the payer who was paying at the more generous level in its traditional insurance plans was able to negotiate larger PPO discounts than the low-rate payer. Though preliminary, these findings suggest that for any given

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Management payments shown are slightly below their Fee Schedule amounts. As the transition proceeds, it is likely that this differential between Medicare and these PPOs will be reduced. On the other hand, for a procedure such as a coronary angioplasty (CPT 92982), the fully phased-in Fee Schedule amount would be below the \$1181 average payment shown in Table IV.5. In 1993, its fully phased-in Fee Schedule amount would have been \$875. Therefore, the transition could result in a potentially greater differential for this service in comparison to the two private payers used in this study. Of course, if these payers' PPO payments for angioplasties are reduced at the same rate, or a greater rate, than is reflected in the Medicare Fee Schedule, the Medicare payment may not lose ground to these PPOs.



payer, the extent of the reduction in spending may be a function of their initial level of prices.

A potentially important implication of the variation in the size of PPO discounts is that the extent of heterogeneity in private payment rates across payers for physician services could gradually diminish. Based on the two payers in this study, we see a 17 percent differential in indemnity payment rates reduced to 5 percent in the PPO market. However, the process of PPO discounting did not seem to undue the historical differences in payments across types of services that the Medicare Fee Schedule was designed to address. Despite some variations in the discounts, for both payers, indemnity and PPO payment rates for procedures, imaging services and tests were considerably higher than rates for E&M services. If the expectation is that through the discounting process fees for E&M services will increase relative to those for other services, as Medicare accomplished through the adoption of its Relative Value Scale (see Levy and Borowitz, 1992), we find little evidence to suggest that has been accomplished by either of the two PPOs analyzed here.

These changes taking place in private sector fees can have important implications for future developments in the policies of public payers. Decision makers have always been concerned that reductions in public rates could make their beneficiaries less attractive to providers and create access barriers. As PPOs grow and their lower fees become more typical of the private market, public payers may have hoped that they would have had the opportunity to lower their rates without risking serious access problems for its beneficiaries. Of course, this opportunity may not have materialized if the lower private rates reduced cross-subsidies to public payers and created demands for higher public fees. However, based on the two payers studied here, there is little reason to conclude that the gap between public and private rates is disappearing.



Two conclusions with respect to Medicare policy follow from these findings. First, simply enrolling Medicare beneficiaries in private PPOs paying at the rates reflected by the two payers in this study would not necessarily result in lower spending, on average, as a result of lower prices. If the argument that “the Medicare program could be rescued if only the Government would adopt some of the cost controls that employers have imposed on their workers under the banner of ‘managed care’” (Freudenheim, 1995) is true and these two payers’ prices are reasonably representative, then savings would have to come from lower rates of service utilization. Whether or not utilization controls would be acceptable to beneficiaries would be an issue policymakers would have to confront.

Second, despite arguments to the contrary (Miller, 1995), there is no evidence from this study or earlier work by PPRC to suggest that national average Medicare fees are generous or are much closer to private payer fees than they have been historically.<sup>13</sup> Therefore, the view that significant program savings can be achieved by reducing Medicare fees without access concerns being an issue may be overly optimistic. Although we acknowledge that these results are based on 1993 data and that the rapidly changing market may have already led to lower private fees than those observed here, a great deal of ground would have had to have been closed in order to put Medicare fees near those of the average private payer. If Medicare reduces its fees and access is not adversely affected, as has occurred at various times over the past decade, it is more likely to be due to providers’ reliance on Medicare revenues than on the fact that Medicare is now the generous payer in the physician services market.

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<sup>13</sup>It is true, however, that evidence exists supporting the view that Medicare is paying more than some private payers for selected services and in selected geographic areas (see, for example, Miller, Zuckerman, and Gates, 1993, and Miller, 1995).





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## **Chapter V**

### **Medicaid Physician Payment: Current Policies and the Potential Impact of the Medicare Relative Value Scale**



## V. MEDICAID PHYSICIAN PAYMENT: CURRENT POLICIES AND THE POTENTIAL IMPACT OF THE MEDICARE RELATIVE VALUE SCALE<sup>1</sup>

### A. BACKGROUND

Although Medicaid physician fees have increased by about 20 percent since 1990, there remains some concern that Medicaid fee levels are too low relative to Medicare and private payers (Norton, 1995; PPRC, 1994).<sup>2</sup> If Medicaid payments are substantially less than other insurers, Medicaid beneficiaries may have difficulty obtaining medical care. This has important implications for ensuring that access for Medicaid beneficiaries is comparable to other federally financed programs, most notably Medicare.<sup>3</sup> Broad state discretion in setting fees has led to widely different payment rates across states. Recent studies of Medicaid payment rates have demonstrated considerable variation across states and, with the exception of obstetrical services, shown that Medicaid fees are considerably lower than Medicare Fee Schedule (MFS) fee levels (Norton, 1994; PPRC, 1995; Holahan, 1991).

In an effort to address concerns about access, the Physician Payment Review Commission (PPRC) recently recommended that if the Medicaid program continues to exist under any potential health care reform, Medicaid fees should be increased to current Medicare levels (PPRC, 1994). A previous study estimated the impact of Medicaid adoption of the MFS in 1990 (Holahan, 1993). In part because of significant differences between Medicaid and MFS fee levels, the study suggested that Medicaid expenditures would increase substantially with the adoption of the MFS. Differences

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<sup>1</sup>This chapter was written by Stephen Norton, Diana Verrilli and Stephen Zuckerman.

<sup>2</sup> Prior studies suggest that the ratio of Medicaid fees relative to Medicare payments, was about 73 percent in 1993 (PPRC, 1994; Norton, 1995). These ratios vary extensively by state and by types of physician services.

<sup>3</sup> Previous studies which aim to assess whether low Medicaid fees affect access to care are mixed. Some prior studies of Medicaid participation rates suggest that physicians would be more likely to treat Medicaid patients if fees were more comparable to other payers (Mitchell, 1991). Other studies suggest that Medicaid payment rates have more of an influence on site of care rather than access to it (Cohen, 1993).



in current fees across states suggest that the impact of increasing fees to Medicare levels will vary greatly by state. The effects would be modest in states with relatively more generous payments and substantial in states with less generous payments.

Policymakers may choose to implement a resource based relative value scale (RVS) in order to systematically correct for inequities in payments across types of services. Implementation of fee schedules based on the RVS, however, would represent a substantial departure from current methods of determining fees for many states. Under RVS, relative physician fees are set on the basis of relative resource costs. These relative costs are then transformed into payment rates through the application of a multiplicative conversion factor (CF) that sets the payment amount for each relative value unit (RVU).<sup>4</sup>

Currently, 12 state Medicaid programs use the Medicare RVS to determine payments and 8 programs plan on adopting the Medicare RVS in the near future (PPRC, 1994). Reasons for implementing a RVS payment scheme tend to vary by state and include objectives such as maintaining greater control over the growth in expenditures, correcting for relative fee inequities across types of services, improving access (eg, through improved physician participation rates) and administrative simplicity (PPRC, 1994).

If Medicaid programs implement the Medicare RVS, they are likely to set their own conversion factor (CF) to reflect their objectives regarding overall levels of payments. State budgetary concerns are likely to play an important role in determining the CF. The CF could be computed in such a way as to maintain current Medicaid expenditures or, if policymakers choose to increase overall levels of payments to expand access, the CF could be set higher than current levels. Furthermore, states may also choose to implement more than one conversion factor as a means of

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<sup>4</sup> Medicare also varies payments geographically in order to reflect differences in practice costs across the country.





maintaining higher fees for selected services such as obstetrical or pediatric care. For example, the state of Washington has separate conversion factors for obstetrical and pediatric evaluation and management services (Whitten, 1994).

In addition to using the Medicare RVS to determine payments, state Medicaid programs might also consider using the uniform payment rules which accompanied the MFS. Medicare uses these rules to determine fees for services such as multiple procedures, certain services rendered by non-physician providers, and physicians who assist at surgery. These payment rules standardized payments in such a way so as to eliminate specialty differentials, reduce payments for certain services provided in an outpatient department, and define payment localities which permit payments to be adjusted to reflect geographic differences in practice costs.

Of those Medicaid programs using the Medicare RVS to set fees, few are using Medicare's payment rules to determine payments. If Medicaid programs use the Medicare payment rules, it would be important to determine how well these rules relate to those used currently. Given the payment policies embedded in the RVS (eg, the RVUs for surgical procedures are based on a predetermined global time period), the extent to which Medicaid payment rules differ from Medicare may result in large differences from fees derived from the Medicare RVS. If current Medicaid payments are based on global periods which are very different from Medicare, for example, movement toward a RVS fee would likely cause changes in the way physicians bill for services related to the surgical procedure itself. Of course, the extent of these changes would vary depending on how much Medicaid payment policies resemble Medicare's.

The purpose of this chapter is twofold. First, we analyze the potential impact of implementing the Medicare RVS system by computing revenue-neutral Medicaid conversion factors using current fee data for 49 states. Second, we assess the similarities between Medicare's uniform



payment rules and current Medicaid payment policies used by Medicaid programs. The remainder of the chapter is divided into four sections. Section B describes the data collection methods we use to obtain information on Medicaid fees and payment policies. This section also discusses the method for deriving revenue neutral conversion factors. Section C reviews results from the CF calculations and the policy survey. The findings from the payment policy survey focus largely on how well Medicare's payment policies relate to those used by Medicaid programs. Section D provides a discussion of the results.

## **B. DATA AND METHODS**

### **FEE SURVEY**

In the spring of 1993, the Urban Institute surveyed state Medicaid programs on fees for 28 common services provided to Medicaid beneficiaries. Forty-nine states and the District of Columbia responded to the survey. Because this effort represented a follow-up survey of Medicaid fees collected by the Urban Institute in 1991, it was designed to cover many of the same services surveyed in the earlier study (Holahan, 1991).

Fees were collected for high expenditure and high volume services, ranging from office visits to obstetrical services. Although total payments per service was generally the most important factor used to select survey procedures, additional criteria for selecting services included service volume and technological intensity. For example, some high volume services such as clinical laboratory services (eg, routine urinalysis) and services such as computerized axial tomography (CAT scan) and cataract extraction were surveyed in order to capture a mix of both routine medical and surgical procedures as well as more technologically advanced services. The methods and results of this survey are described in a separate report (Norton, 1995).



In total, the survey procedures presented in Table V.1 account for about 50 percent of total expenditures for Medicaid physician services in 1988. Also presented in Table V.1 are the percent of total relative value units (RVUs) each service comprises with respect to all services presented in the table. Total RVU shares provide a means of assessing the relative weight of each procedure in terms of each service's volume and intensity. RVU shares are derived by first summing the service volume for each service and then multiplying the sum by the total RVUs (i.e., work, malpractice, and practice expense RVUs) for the service.<sup>5</sup> This value is then divided by the RVUs for all 28 services to compute each services' percent of all RVUs. These are subsequently used as weights in the CF calculations. From this table it is apparent that the E&M services and obstetrical services will have the most weight in the computation of revenue-neutral conversion factors and selected surgical procedures (eg, cataract extraction) and tests (eg, urinalysis) will have the least.

Two limitations to using this data should be noted. First, due to CPT coding changes in 1992, we did not have direct service volume data for all of the evaluation and management (E&M) (eg, office and hospital services) codes surveyed in 1993. This is a result of substantial revisions and deletions of E&M codes in 1992. In order to develop RVU shares for the office, hospital, and consultative services included in the fee survey, we crosswalked the 1988 service codes to 1992 CPT codes using an algorithm developed by HCFA and described in the 1992 MFS.<sup>6</sup> HCFA used this crosswalk to project how physicians would use the new E&M codes and to determine their RVUs. This crosswalk is presented in Table V.2.

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<sup>5</sup> The RVUs assigned to each service are from the 1993 Medicare Fee Schedule. Charge-based RVUs for clinical laboratory services were derived using their 1993 Medicare median prevailing charge screens. For a further discussion of these methods, see Verrilli and Zuckerman, 1994.

<sup>6</sup> Health Care Financing Administration. Part III Department of Health and Human Services 42 CFR parts 405, 413, and 415: Medicare program; Fee Schedule for Physicians' Services; Final Rule. *Federal Register*. November 25, 1991.





Table V.1

Services Included in the the Medicaid Survey and their  
Percentage of Total Relative Value Units (RVUs) of Surveyed Services

Type of Service Group and Procedure Code	Procedure Description	Percentage of Total RVUs
<b>IMAGING SERVICES</b>		<b>8.3%</b>
70450	CAT Scan, Head or Brain	1.3
71020	X-Ray, Chest, Two Views	3.6
76805	Echography, Pregnant Uterus	3.5
<b>EVALUATION AND MANAGEMENT SERVICES</b>		<b>62.9</b>
90843	Psychiatric, 20 to 30 Minutes	1.8
90844	Psychiatric, 45 to 50 Minutes	5.9
99203	Office Visit, New Patient, 30 Minutes	5.0
99213	Office Visit, Est Patient, 15 Minutes	39.9
99214	Office Visit, Est Patient, 25 Minutes	4.4
99222	Initial Hosp Care, New or Est, 50 Minutes	2.8
99244	Office Consult, New or Est, 60 Minutes	0.9
99254	Initial Hosp Consult, 80 Minutes	2.2
<b>PROCEDURES</b>		<b>26.5</b>
43235	Upper GI Endoscopy	0.5
58120	Dilation and Curettage of Uterus	0.4
58150	Total Hysterectomy	0.5
59400	Total Obstetric Care/Vaginal Delivery	10.7
59410	Vaginal Delivery Only	7.8
59510	Total Obstetric Care/Cesarean Delivery	3.2
59515	Cesarean Delivery and Postpartum Care	2.6
66984	Cataract Removal/Lens Implant	0.4
69437	Tympanostomy	0.3
<b>TESTS</b>		<b>2.4</b>
81000	Urinalysis Routine	0.5
87081	Culture, Bacterial, Screening Onl	0.5
88305	Surgical Pathology, Level IV	0.5
93000	Electrocardiogram, w/Interp and Report	0.9





Table V.2

Algorithm Used to Crosswalk Deleted 1988 Evaluation and Management Codes to 1992 CPT-4 Codes

1992 HCFA Crosswalk				
1993 CPT-4 Codes		1988 CPT-4 Codes		Percentage of 1988 Code that is Equal to 1993 Code
CPT-4 Code	Description	CPT-4 Code	Description	
99203	Office visit, new patient, 30 minutes	90015	Office visit, new patient, intermediate	100%
99213	Office visit, established patient, 15 minutes	90050	Office visit, established patient, limited	100%
99214	Office visit established patient, 15 minutes	90070	Office visit, established patient, extended	100%
99222	Initial hospital care, new or established patient, 50 minutes	90215	Initial hospital visit, new or established patient, intermediate	100%
		90220	Initial hospital visit, new or established patient, comprehensive	50%
99244	Initial office consult, new or established patient, 60 minutes	90620	Initial non-inpatient consultation, comprehensive	100%
99254	Initial hospital consult, new or established patient, 80 minutes	90620	Initial inpatient consultation, comprehensive	100%

Source: Federal Register, 11/25/91, pp. 59580-59581.



Surveyed services affected by this crosswalk included 3 office visits, a hospital visit and two consultations. As shown in Table V.2, in some cases a 1993 code crosswalks to more than one deleted code. For example, the service volume for a 1993 50-minute initial hospital visit (CPT 99222) is expected to equal 100 percent of the volume data for a 1992 intermediate hospital visit (CPT 90215) and 50 percent of the volume data for a 1992 initial comprehensive hospital visit (CPT 90220). Since we did not have service volume data available to crosswalk all of the 1993 codes, it was not possible to accurately link four services (two hospital visits, an office visit, and an emergency department visit) to 1988 codes.

Second, the service volume counts we use are somewhat outdated. Due to the expense and time required to update the 1988 data, it was not feasible to acquire more recent data. Since the primary reason for using these data is to develop individual service weights, we assume the mix of services provided to Medicaid beneficiaries in 1993 did not change substantially over this period.

## **MEDICAID PAYMENT POLICY SURVEY**

In June of 1994 the Urban Institute conducted a survey of the 50 Medicaid programs plus the District of Columbia. In collaboration with HCFA staff we developed a mail survey which identified high priority policy questions--which could be answered readily with available physician payment manuals--which have important implications for implementing a RVS payment system. In this survey, states were asked to provide information on:

- the definition of global surgical payment periods for major, ambulatory and minor procedures;
- supplemental payments for office medical supplies;
- payments for physicians who assist at surgery;
- payments for multiple procedures and payment differentials for sites of service, types of providers, and geographic areas;



- payments for the technical and professional component of radiology services and diagnostic tests; and
- payments for anesthesia services .

Although the primary purpose of the study was not to identify those states that specifically adopted the RVS system, we did ask general questions on whether they have adopted the RVS and if they use all or only selected Medicare payment principles. A copy of the survey instrument is included in Appendix D.

Survey instruments were sent to each Medicaid director. States were somewhat slow in responding to the survey and as a result, after 3 months in the field, we mailed a second questionnaire to 28 non-respondents. By the end of October, we discontinued efforts to contact non-respondents and began to summarize the 44 surveys we received. Those Medicaid programs that did not reply within this specified time were the District of Columbia, Kansas, Nevada, Nebraska, Rhode Island and West Virginia. Since Medicaid enrollees in Tennessee receive medical services through managed care arrangements, the survey was not applicable to this state.<sup>7</sup> For those states that did respond, we reviewed each survey to assess the consistency of responses across questions and where possible, for consistency with prior surveys of Medicaid payment policies.<sup>8</sup>

The quality of information we received from most states was adequate. However, some states provided either incomplete or ambiguous responses. For example, some states provided extensive information about the payment policies for anesthesia services, while others indicated only that they allowed reimbursement to anesthesiologists who supervised certified registered nurse

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<sup>7</sup> Although Medicaid enrollees in Arizona receive care primarily through managed care organizations, a small proportion of enrollees receive care in a fee-for-service arrangement. Information from the Arizona Medicaid program is therefore included in this analysis.

<sup>8</sup> The 1991 and 1993 Urban Institute Medicaid physician fee surveys also asked questions regarding some physician payment policies such as global payment policies and specialty payment differentials.





anesthetists (CRNA). Due to time and resource constraints, it was not possible to follow-up on all incomplete or ambiguous responses for each survey item. Instead, we focused our efforts on clarification of the length of the post-operative period in the global surgical package (see, for example, Question 1 of the survey instrument).

## REVENUE-NEUTRAL CONVERSION FACTORS

State and national conversion factors are computed using the 24 services included in the 1993 fee survey.<sup>9</sup> Due to the limited number of survey procedures, it was not possible to estimate conversion factors for different types of services. In order to determine the current level of payments using the Medicare RVS, we calculate conversion factors (CFs) that could be applied to Medicare RVS to generate fees that would be revenue-neutral relative to current payment methodologies. Algebraically, service-specific CFs for each service  $I$  in state  $k$  can be expressed as:

$$CF_k^I = \frac{payment_{ik}}{(RVU_{Wi} + RVU_{Pi} + RVU_{Mi})}$$

### Equation (1):

where  $RVU_{Wi}$  = work RVU for Service  $I$   
 $RVU_{Pi}$  = practice expense RVU for Service  $I$   
 $RVU_{Mi}$  = malpractice expense RVU for Service  $I$   
 $payment_{ik}$  = current Medicaid fee for Service  $i$  in State  $k$

A CF that maintains revenue neutrality across all services would be equal to the ratio of total spending under current fees to the total volume of RVUs represented by these services. Since we do not have total service volume available for each state, we compute the CF as the weighted average

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<sup>9</sup> As explained previously, four surveyed services were not included in the RNCf calculations because they could not be accurately crosswalked to a 1988 clinically equivalent service. Since we do not have service volume data for these services, it was not possible to include them in the analysis.



of the service-specific CFs. The weights used in the computations are the shares of total RVUs the service accounts for within the list of surveyed services (the right most column of Table V.1). Note that the lack of state specific service volume information introduces a potential bias into the calculation of the CF. If the service's share of total RVUs within a state is actually higher than the national share, the service will receive too much weight in our computation of CFs. The formula for estimating state-specific revenue-neutral CFs (RNCFs) can be written as:

$$RNCF_k = \frac{\sum_{i=all} CF_k^i S_i}{\sum_{i=all} S_i}$$

#### Equation (2):

where  $S_i$  = each services share of total RVUs (the rightmost column of Table V.1).

Intuitively, these CFs are those that might be used by any state implementing an RVS-based payment system on its own. While these are indicative of what state specific CFs might look like, states following this policy approach would obviously want to calculate a CF based on complete data. However, another potential policy approach would be to establish a national Medicaid fee schedule that was varied across states according to the Geographic Practice Cost Index (GPCI). In this situation, it is necessary to remove underlying cost variation before computing the CFs by deflating changes by the GPCI.<sup>10</sup> This alters the calculation described above. Specifically, we adjust the RVUs in the denominator of Equation (1) by the Medicare GPCI. This GPCI-adjustment to the service specific CF yields  $CF^*$  that can be written as:

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<sup>10</sup> We do not assume that the same decision regarding the extent of variation in the physician work component of the GPCI that is reflected in the MFS (i.e., one-quarter variation) would be made here. Therefore, we apply the full work GPCI in this calculation.



**Equation (3):**

$$CF_k^* = GPCI - adjusted \ CF_k^i = \frac{payment_{ik}}{(RVU_{Wi} * GPCI_W) + (RVU_{Pi} * GPCI_P) + (RVU_{Mi} * GPCI_M)}$$

where  $GPCI_W$  = the full work GPCI in state  $k$

$GPCI_P$  = the practice expense GPCI in state  $k$

$GPCI_M$  = the malpractice expense GPCI in state  $k$

Then, using the  $CF_k^*$ , we recompute a RNCF for each state,  $RNCF^*$  [see equation (2)]. In order to aggregate to the national level, we need to weight each state's  $RNCF^*$  so that the varying sizes of Medicaid programs are considered. For example, states with larger Medicaid programs and more generous benefit packages would have more influence on the overall CF than smaller Medicaid programs such as South Dakota. Since data do not exist that would allow us to weight each state by its overall service volume, we use total Medicaid expenditures in each state instead.<sup>11</sup> Algebraically, a weighted national level conversion can be written as:

$$RNCF_N = \frac{\sum_{i=all} RNCF_k^* E_k}{\sum_{i=all} E_k}$$

**Equation (4)**

where  $N$  = National

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<sup>11</sup> This expenditure data was obtained from HCFA Form 2082 Medicaid data.



$E_k$  = the number of Medicaid enrollees in state  $k$

## C. RESULTS

### REVENUE-NEUTRAL CONVERSION FACTORS

Table V.3 includes RNCFs for all 49 Medicaid programs. The state results are presented in descending order. There is a substantial amount of variation in the estimated conversion factors, ranging from a high of \$60.80 (Alaska) to a low of \$13.91 (New Jersey). Using the 1993 Medicare conversion factor for primary care services (\$33.72) as a baseline for comparison, 48 states have conversion factors below this value. Several states with large Medicaid populations are well below Medicare. For example, California (\$20.01), New York (\$15.41) and New Jersey (\$13.91) all have conversion factors that are over 40 percent less than Medicare. These RNCFs illustrate that if each state implemented a revenue-neutral RVS-based system on their own, considerable variation across states in Medicaid payments for services would exist.

In the hypothetical case where a national revenue-neutral Medicaid fee schedule was implemented, large redistributions in payments both across states and services would result. Using the methodology described above, we estimated a national Medicaid conversion factor equal to \$24.40. The wide variation in state-specific RNCFs would imply large redistributions across states if a single national conversion factor were used. For example, in states such as New Jersey and New York, where state-specific RNCFs are considerably lower than the estimated national Medicaid conversion factor, large increases in physician payments would occur. On the other hand, in states such as Alaska and West Virginia, where estimated state-specific RNCFs are considerably higher than the estimated national Medicaid conversion factor, large reductions in payments would occur.





Table V.3

State-level Medicaid Revenue Neutral Conversion Factors<sup>1</sup> (RNCF)

State	1993 Revenue-Neutral Conversion Factors	State	1993 Revenue-Neutral Conversion Factors
Alaska <sup>2</sup>	60.80	Florida	25.27
West Virginia	38.55	New Hampshire	25.05
Georgia	32.44	Wisconsin	24.96
Nevada	32.42	North Dakota	24.91
Wyoming	31.51	Kansas	23.90
Massachusetts	31.47	South Dakota	23.29
Nebraska	30.93	Colorado	23.13
Kentucky	30.84	Delaware	23.07
Arkansas	30.59	Pennsylvania	22.54
Washington	29.58	Iowa	22.16
Idaho	28.89	Utah	22.10
Alabama	28.82	Vermont	22.08
Louisiana	28.67	Connecticut	21.81
Virginia	28.49	Mississippi	21.24
Tennessee	28.20	Michigan	21.08
Maryland	27.83	Oregon	21.08
North Carolina	27.82	South Carolina	20.95
Minnesota	27.72	California	20.01
Montana	27.22	Maine	19.94
Texas	26.90	Illinois	19.74
Hawaii	26.82	Ohio	19.19
District of Columbia	26.70	Missouri	18.43
Oklahoma	26.66	Rhode Island	16.33
Indiana	25.94	New York	15.41
New Mexico	25.66	New Jersey	13.91

<sup>1</sup> These conversion factors are computed using equations 1 and 2 in the body of the text.

<sup>2</sup> Fee data used in the computation of the RNCF are for Anchorage, Alaska only.



Table V.4

Change in Average Payment for Selected CPT-4 Codes Resulting  
from the Implementation of a National Medicaid Revenue-Neutral Fee Schedule.

Procedure Code and Description	Current Average Payment	RBRVS- Based Payment	Percent Change
<b>IMAGING SERVICES</b>			
70450 CAT Scan, Head or Brain	\$176.86	\$151.77	-14.2%
71020 X-Ray, Chest, Two Views	25.49	23.91	-6.2
76805 Echography, Pregnant Uterus	84.38	90.77	7.6
<b>EVALUATION AND MANAGEMENT SERVICES</b>			
90843 Psychiatric, 20 to 30 Minutes	28.13	37.09	31.9
90844 Psychiatric, 45 to 50 Minutes	48.82	58.56	20.0
99203 Office Visit, New Patient, 30 Minutes	32.09	43.92	36.9
99213 Office Visit, Est Patient, 15 Minutes	22.56	24.40	8.2
99214 Office Visit, Est Patient, 25 Minutes	31.18	37.82	21.3
99222 Initial Hosp Care, New or Est, 50 Minutes	49.06	74.66	52.2
99244 Office Consult, New or Est, 60 Minutes	67.79	88.57	30.7
99254 Initial Inpatient Consultation, 80 Minutes	67.16	90.28	34.4
<b>PROCEDURES</b>			
43235 Upper GI Endoscopy	195.18	158.36	-18.9
58120 Dilation and Curettage of Uterus	170.50	142.98	-16.1
58150 Total Hysterectomy	629.48	616.1	-2.1
59510 Total Obstetric Care/Vaginal Delivery	1,137.45	861.56	-24.3
59410 Vaginal Delivery Only	679.59	574.62	-15.5
59515 Cesarean Delivery and Postpartum Care	792.17	594.87	-24.9



The impact on payments for Medicaid services resulting from the implementation of a national Medicaid fee schedule would generally reflect the redistribution of payments inherent in the Medicare RVS system. To illustrate this point, Table V.4 includes a list of selected services and their respective average payment rates across all states. Using a national Medicaid CF we estimate payment changes that would occur if the Medicare RVS-system were used. For example, the fee for an initial 50 minute hospital visit (CPT 99222) would increase 52.2 percent while the upper GI endoscopy would decline 18.9 percent. Similarly, payment for a CAT scan of the head (CPT 70450) would fall by 14.2 percent. In contrast, the fee for a 30 minute office visit for a new patient (CPT 99203) would increase by 36.9 percent. In general, the implementation of a national Medicaid fee schedule would result in increases in payments for visits, consultations, and other services that involve evaluation and management and decreases in payments for surgery, other procedures (eg, endoscopy), imaging and pathology services. The impact on any given state would in turn be a function of the distribution of payments and services within that state.

## **MEDICAID PHYSICIAN PAYMENT POLICIES**

Although HCFA guidelines regarding payment policies existed prior to the implementation of the MFS, these guidelines were often applied differently depending upon the carrier. For example, although all Medicare carriers under the previous CPR payment system based payment for surgical services on a global package, the definition of the package varied extensively (PPRC, 1989). The MFS included nationally uniform physician payment policies which aim to (1) clarify service definitions, (2) establish rules for modified services, and (3) in general, enhance consistency across carriers. In what follows, we compare Medicaid physician payment policies to the rules







established under the MFS, with regard to the three general areas of payment.<sup>12</sup> In those states where payment policies are different than Medicare, we provide a discussion of these differences where information permits. Appendix E provides a more detailed listing of Medicaid physician payment policies.

## **Service Definitions**

Global Surgical Package. Major Medicare surgical services are paid on the basis of a global fee that includes the pre-operative evaluation and management visits beginning the day before the surgery, the surgery itself, and post-operative services related to the surgery. The surgical consultation in which the decision to undergo surgery is made is reimbursed separately. The global payment package varies by four broad types of procedures including major, minor, ambulatory, and endoscopic. For major and ambulatory procedures, post-operative services related to the surgery cannot be billed separately by a physician for 90 days after the surgery itself. For minor procedures, the length of the post-operative payment period is 10 days. For endoscopic procedures, physicians can bill separately for services immediately after the procedure is completed. We asked states to provide information on the global surgical payment package for 9 procedures which spanned these four categories of services differentiated in Medicare.<sup>13</sup>

Although nearly all Medicaid programs have developed a global surgical payment policy, there is considerable variation in what is included in the global package. Table V.5 indicates that over half of the states surveyed follow Medicare and do not include payment for the surgical consult in the global package for any of the procedures surveyed. For the remaining states which bundle

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<sup>12</sup> Information on Medicare physician payment policies is taken from the January 1, 1992 Federal Register, Vol 56, No.227. Updates to Medicare's physician payment policies were identified in the Nov 25, 1992 Federal Register, Vol. 57, No.228.

<sup>13</sup> Given the ambiguity and large variation in the responses we received for other questions related to the global surgical package (eg, number of post-op visits), it was not possible to summarize these results in a meaningful way.



Table V.5

## Comparison of Medicare and Medicaid Physician Payment Policies: Service Definitions

Medicare Policy	Number of States <sup>1</sup>		
	Same as Medicare	Different than Medicare	No Information - Unclear
<b>Global Surgical Payment</b>			
The Surgical Consult Is Not Included in the Global Payment Package	23	17	4
Post-Operative Period Length Major 90 Days Ambulatory 90 Days Minor 10 Days Endoscopic 0 Days	8	31	5
<b>Payment for Supplies</b>			
Physicians Bill Separately for Supplies	26	18	
<b>Payment for Anesthesia Services</b>			
Payment Based on ASAs <sup>2</sup> RVUs	17	12	15
15-Minute Time Increments	22	11	11

1. See Table E.2 for a listing of states (Appendix E).
2. ASA refers to the American Society of Anesthesiologists.



payment for the surgical consult into the global package, there is considerable variation across broad service groups and even across procedures within these groups. In Illinois, for example, physicians are paid separately for the surgical consultation in which the decision to undergo a destruction of a benign facial lesion (CPT 17000) and a cystourethroscopy (CPT 52000) is made, but not paid separately when the surgical consult involves major procedures such as an arthroplasty of the knee (CPT 27447) and a coronary artery bypass (CPT 33512).

Overall, most Medicaid programs have adopted a post-operative payment period which is different from Medicare's. As Table V.5 illustrates, only eight of the 44 states surveyed have a post-operative period which replicates Medicare's policy. Of the 31 states with other post-operative payment periods, 13 have periods that are longer than Medicare, with one state -- New York -- defining its post-operative period for an arthroplasty of the knee (CPT 27477) as 180 days. The remaining states have post-operative payment periods ranging from 5 to 62 days.

Separate Payment for Supplies. HCFA developed a payment policy for providing reimbursement for supplies for selected services in which the assigned RVUs may not adequately account for the resource costs of incidental supplies.<sup>14</sup> The 1993 MFS defined 47 procedures for which they allow separate payment for supplies is permitted.<sup>15</sup> For all other services, supply costs are assumed to be fully covered by the practice expense component of the service. Services for which additional supply expenses are allowed receive an additional payment of 0.96 RVUs. We asked Medicaid programs to indicate whether or not they reimbursed physicians for supplies separately.

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<sup>14</sup> In most cases, Medicare pays for durable medical equipment and other supplies separately.

<sup>15</sup> In 1994, the list of procedures receiving additional payment was increased to 72.





Table V.5 indicates that 26 of the Medicaid programs surveyed allow physicians to bill separately for supplies incidental to services provided in the physician's office. Some states include an add-on to payments for certain procedures. Examples of states which provide separate or additional payments for supplies include California, Georgia, Indiana, Michigan, New Hampshire, New York, North Carolina, South Carolina, Utah and Wyoming. Similar to Medicare, a number of states limit additional payments for supplies to a set of procedures. Georgia, Michigan, Mississippi, and North Carolina, for example, all indicated that they limited payments for supplies to a set of procedures similar to those identified in Medicare regulations. States which provide separate payments for surgical trays include Hawaii, Iowa, Maine, Mississippi, Ohio, Oregon, Vermont, and Virginia.

Anesthesia Services. Medicare pays for anesthesia services on the basis of relative values developed by the American Society of Anesthesiologists (ASA). Anesthesia time is reimbursed in 15 minute time increments. Payment for an anesthesia service is computed as the sum of RVU base units and the time units multiplied by a conversion factor. An anesthesiologist who is supervising a qualified anesthetist receives payment based on reduced RVU base and time units. Base units are reduced by 10, 25 and 40 percent for the concurrent medical direction of 2, 3 and 4 nurse anesthetists, respectively. In addition, rather than 15 minute time units, time is broken into 30 minute time units.

As Table V.5 illustrates, in general, survey respondents identified the ASA relative value guide or Medicare policy as the basis for anesthesia payments.<sup>16</sup> Seventeen states stated that they

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<sup>16</sup> Information we received on payments for anesthesia services was sparse. Fourteen states did not provide enough information to ascertain how anesthesia payments are determined. Eleven states did not provide information on the time units used in the computation of anaesthesia payment and ten states did not provide enough information on how independent CRNAs are reimbursed. Finally, seven states did not provide enough information to determine how physicians who supervise a qualified anesthetist are reimbursed.





use the ASA anesthesia RVUs with a state specific conversion factor or use a percentage of Medicare's payment for the same service to determine payment. Five states use a state specific charge profile or a proportion of the surgical fee to pay for anesthesia services.

Similar to Medicare, 22 states pay for the time component of anesthesia services in 15 minute blocks. Two states (Illinois and Utah), however, use 12 minute time units. The remaining states use other approaches to reimburse anesthesiologists. In Hawaii, for example, the time component of anesthesia services is broken into 15 minutes in the first hour, and 10 minutes in the second hour. The survey respondent indicated that this is done as a means of recognizing the higher intensity and complexity associated with longer procedures.

Many Medicaid programs make separate payments to physicians for the supervision of qualified anesthesiologists. The payment methods most states use are similar to Medicare with respect to reduced payments and a sliding scale. Nineteen states surveyed provide payment to anesthesiologists supervising a CRNA which ranges from 10 to 70 percent of the full anesthesiologist's fee for the service. Similar to Medicare, the percentage is a function of how many CRNAs the physician is supervising. Louisiana, for example, follows Medicare's example, reducing payment by 10, 25, and 40 percent for the supervision of 2, 3, and 4 CRNAs respectively. Twenty-two states do not provide separate payments to physicians who supervise CRNAs or do not make such a policy differentiation.

Finally, states use different methods to reimburse independent CRNAs. In 10 states, CRNAs and anesthesiologists are reimbursed at the same rate as an anesthesiologist. Fourteen states paid independent CRNAs a proportion of the anesthesiologists fee, ranging from 70 to 90 percent and 10 states do not allow separate billing for independent CRNAs.

### **Selected CPT Modifiers**



Payments for Assistants at Surgery. HCFA explicitly recognizes the need for more than one physician in some surgical procedures, but also recognizes that the resources used by that second physician may be considerably less than for the primary physician. As a result, HCFA established a uniform payment rule that limits payments for assistant surgeons to 16 percent of the payment schedule amount for the global surgical service. In addition, reimbursement is allowed only for those services which historically have used assistants at surgery for at least 5 percent of the cases as determined by national Medicare claims data.

Almost all Medicaid programs limit payment to physicians who assist at surgery. Table V.6 illustrates that only six Medicaid programs -- Alabama, Florida, Georgia, Iowa, Michigan, and Texas -- use Medicare's exact payment rules for physicians who assist at surgery. However, many states pay for assistant surgeons at rate reductions close to those used by Medicare. In 27 states, physician's who assist receive 20 percent of the payment for the primary surgeons fee, while four states pay 15 percent of the full payment. Only three states pay more than 25 percent of the full payment. Nineteen states use Medicare guidelines to identify the services which appropriately require an assistant at surgery. The remaining states use other methods of determining whether they will pay separately for surgical assistants.

Professional and Technical Component of Services. Medicare differentiates payments between the professional and the technical component of some services. The professional component includes the physician work, professional liability costs, and a share of practice expenses. The technical component has no relative value for work, but has a practice expense and malpractice component which includes, among other costs, the cost of equipment, supplies and technicians' salaries. The distinction between the professional and technical portion of the service is relevant for services such as diagnostic and therapeutic radiology services and physician pathology



Table V.6

## Comparison of Medicare and Medicaid Physician Payment Policies: Selected CPT Modifiers

Medicare Policy	Number of States <sup>1</sup>		
	Same as Medicare	Different than Medicare	No Information - Unclear
<b>Payment for Physicians Who Assist</b>			
Physicians Who Assist Receive 16% of Total Fee	6	37	1
Uses Medicare List to Determine Services for Which Assistance at Surgery Payments are Permitted.	19	18	7
<b>Payment for Professional Component</b>			
Fees Based on the American College of Radiology RVU Study	14	23	7
<b>Payment for Multiple Procedures</b>			
100% of 1st Procedure, 50% of 2nd Procedure, 25% of All Subsequent Procedures	14	29	1

1. See Table E.2 for a listing of states (Appendix E).





services.<sup>17</sup> The MFS values are based generally on a relative value scale developed by the American College of Radiology (ACR) which differentiated RVUs on the basis of professional and technical components. These values were rescaled when merged into the MFS.

As Table V.6 shows, 14 states use approaches which are similar to Medicare's reimbursement for the professional and technical components of services. Of the remaining states, 17 use a proportion of the total Medicare fee for a service. These proportions range from 30 to 70 percent for the professional component. The remaining states use a combination of RVS and state determined fees, McGraw Hill RVUs, California RVU scale or a combination of RVU scales to establish payments for services.

Multiple Procedures. Multiple procedures are those performed by a physician on the same patient on the same day for which Medicare allows separate payment. Currently, if more than one procedure is provided on the same patient during a single operative session, Medicare will pay 100 percent of the global fee only for the highest valued procedure, 50 percent of the global fee for the second most expensive procedure, and 25 percent of the global fee for the third, fourth and fifth most expensive procedures. Special rules apply to endoscopic and dermatologic procedures.<sup>18</sup>

As Table V.6 illustrates, fourteen of the 44 states surveyed have a multiple procedure payment policy similar to Medicare. However, the majority of states are more generous than Medicare. Twenty states recognize 100 percent of the payment for the most expensive procedure

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<sup>17</sup> The basis of payment for the technical and professional components of diagnostic, radiology and pathology procedures differ. RVUs for the professional component of diagnostic procedures are created by summing the work, practice expense and physician liability RVUs. The technical component is the difference between total RVUs and the professional component. For pathology procedures, the technical component is calculated as 30% of the professional component computed for diagnostic procedures.

<sup>18</sup> In the case of multiple endoscopic procedures, the full value of the higher valued endoscopy is recognized plus the difference between the next highest endoscopy and the base endoscopy. Medicare has also identified some dermatology services for which the multiple procedures rules do not apply because the RVUs for these codes reflect the multiple nature of the procedure.



and 50 percent for all subsequent procedures. One state -- Montana -- paid 100 percent for all procedures. Four states were less generous than Medicare and 2 states -- New York and New Jersey -- limit the total amount payable rather than payments for individual procedures.

## **Other Issues**

Physician and Non-physician Differentials. Medicare does not currently differentiate payments on the basis of physician specialty. In some instances, however, Medicare does differentiate between non-physician and physician providers. Although payment for some non-physician providers are the same as for physician providers (e.g., optometrists and ophthalmologists), certified nurse midwives (CNMs) are currently paid at 65 percent of the physician payment schedule amount.

As shown in Table V.7, the majority of Medicaid programs surveyed do not differentiate payment on the basis of specialty. However, 11 (e.g., Alabama, Connecticut, and Wisconsin) vary payments to some physicians. In Alabama, pediatricians and neonatologists receive 145 percent of the fee on file for critical care services (CPT 99291 and 99292). Both New Jersey and New York differentiate payment on the basis of specialty. In New York for example, an obstetrician billing for a comprehensive visit for initial observation care (CPT 99218) would receive \$10 reimbursement. For the same service a neurologist would receive \$15 and a general practitioner would receive \$12.50. In New Jersey, a general practitioner would be reimbursed at a lower rate than an obstetrician for a routine delivery with postpartum care (CPT 59400). Some states provide bonus payments to certain providers. In Wisconsin, for example, primary care specialties such as general practice, family practice, internal medicine, pediatrics and emergency medicine receive a 2 percent bonus relative to fees for other providers.



Table V.7

Comparison of Medicare and Medicaid Physician Payment Policies:  
Other Issues

Medicare Policy	Number of States <sup>1</sup>		
	Same as Medicare	Different than Medicare	No Information - Unclear
<b>Provider Distinctions</b>			
No Differentiation Based on Specialty	33	11	0
Physician/Non-Physician Distinction Made in Some Cases	33	11	0
<b>Site of Service Differential</b>			
Payment Limits Based on Site-of-Service	8	36	0
<b>Geographic Adjustment</b>			
Increase Payments for Physicians in Health Professional Shortage Areas	3	41	0
Adjust Fees on the Basis of Practice Cost Differentials	1	43	0

1. See Table E.2 for a listing of states (Appendix E).





With regard to physician and non-physician providers, thirty-three Medicaid programs differentiate payments. According to the survey, CNMs are typically paid 70 to 90 percent of the physician payment. In a number of states, CNMs are paid differently based on the procedures provided or the site within which the service was provided. In Idaho, for example, the proportion of the physician's payment rate paid to CNMs varied by procedure. In New Mexico and Nevada, CNMs are paid lower rates if the service was provided in an inpatient than in an outpatient setting.

Site-of-Service Differential. The 1993 MFS includes a list of procedures that are subject to a site-of-service differential which limits payments when provided in an outpatient setting. The site-of-service limitation reduces practice expense RVUs by 50 percent. In the 1992 MFS, for example, HCFA estimated that this RVU adjustment resulted in an average payment reduction of 21 percent (Federal Register, 1991).

As Table V.7 shows, site-of-service has no impact on payment rates in 36 Medicaid programs. A small number of states, however, do differentiate payment on the basis of site-of-service. In California, for example, common office procedures such as acne surgery (CPT 10040), excision of a benign tumor (CPT 11421), a breast biopsy (CPT 19100) and the application of an ambulatory type cast (CPT 29450) are paid 80 percent of the fee when the service is provided in an outpatient or surgical clinic. Similarly, in Illinois, ambulatory services such as cast application, suture repair of a skin wound and endoscopies are paid at a lower rate in the outpatient setting than in the physician's office. In Michigan and Ohio, payments for evaluation and management services provided in the outpatient or inpatient setting are reduced by 40 and 30 percent, respectively, relative to services provided in a physician's office. In Texas, payments for non-emergency services provided in the emergency room are reduced by 40 percent.





Provisions for Geographic Adjustment. The MFS adjusts the practice cost and malpractice liability components of the payment schedule to fully recognize the geographic variation in these costs. The physician work component, however, reflects only one-quarter of the geographic differences in costs-of-living. In addition, the MFS includes special payment provisions for physician services provided in Health Professional Shortage Areas (HPSA). HPSAs are defined as those areas (both inner city and rural) with shortages of health care personnel. Physicians who provide services in these areas receive a 10 percent bonus payment.

As Table V.7 illustrates, one state differentiates payments on the basis of geographic practice cost differences and three states provide increased reimbursement to physicians practicing in specific geographic areas. In Alaska, there are three geographic areas which receive different payment rates due to cost of living differences. Three other states differentiate payments to insure access in provider shortage areas. In Alabama, payment rates are greater in rural areas than in urban areas. In Utah, payment in rural areas for physicians services is 112 percent of the standard fee. Similar to Medicare, Wisconsin provides bonus payments to services provided in HPSAs. Wisconsin pays 120 percent and 125 percent of the fee on file for obstetric and pediatric services provided in an HPSA respectively.

#### **D. DISCUSSION**

The differences in state-level conversion factors suggests a substantial degree of Medicaid payment variation across states. As suggested by the results from the payment policy survey, one possible explanation for this variation are divergences in payment policies such as a state's definition of the global surgical period. However, given that the estimated conversion factors are weighted by each service's share of total RVUs and that surgical procedures represent less than a third of the total



RVUs, differences in the definition of surgical packages are likely to explain only a portion of the variation in CFs. Conversion factor differences are more likely due to real differences in fees- that is, some states are more generous than others with respect to overall payments for Medicaid physician services.

The large range of estimated CFs suggests that the use of a national CF across all states, even adjusted by the GPCIs would result in large redistributions of dollars across states. The state-level CFs also suggest large disparities in payment to RVU ratios within each state. This implies that the perceived inequities across payments which prompted Medicare to develop the RVS, are also present in Medicaid payment systems. For example, payments per RVU for procedures are far more generous than are payments for evaluation and management services. Procedures such as an upper gastrointestinal endoscopy (CPT 43235) and dilation and curettage of the uterus (CPT 58120) have high payment rates per RVU compared to evaluation and management services such as a 15 minute established patient office visit (CPT 99213).

Finally, results from this study also show that although the Medicare RVS is used as a basis for physician payment rates in 22 states (see Table V.8), few states are using all of Medicare's payment principles. Across most states, the policies that are perhaps most similar to Medicare are those which determine payments for assistants at surgery, multiple procedures, and anesthesia services. On the other hand, policies pertaining to definitions for global surgical packages, differentials across types of providers, and site of service differentials seem to be most dissimilar. In most states, implementation of Medicare's payment rules would lead to large changes in the current methods used to determine physician fees.

Given how some Medicaid programs currently reimburse physician services, it is unclear whether states would want to implement Medicare's payment policy rules. Although these payment



policies provide an important means for standardizing payments across providers as well as sites of care, it not clear this is an objective of Medicaid policymakers. As was shown in both the fee survey and the payment policy survey, some states consciously differentiate payments based on provider, site of service, and type of service. For example, some states provide extra payments for high-risk patients (eg, obstetrical services in New Mexico) and bonus payments for primary care services. These variations in payment policies and objectives, suggest that if states chose to incorporate Medicare's rules, it is likely that some states would make technical changes to the policies as a means of tailoring the rules to reflect their own objectives.

Some of the payment policy tailoring that might occur if states were to implement Medicare's payment rules could also be accomplished through multiple conversion factors. For example, if a policymaker's objective is to establish higher fees for primary care physicians, a separate and higher conversion factor could be set for these physicians. Administratively, it would be more straightforward to implement multiple conversion factors as a means of maintaining fees for selected services, than developing numerous specialty specific fee schedules.

This study suggests that moving Medicaid programs onto an RVS system would result in substantial changes in payment rates. This may be viewed as undesirable in some states. For others, this movement may provide a means of addressing current imbalances in payment levels by redistributing dollars to services which are currently underpaid relative to their resource costs (e.g., E&M services). The outcome of this could be improved access to primary care services and equity among physicians. Although more and more states are pursuing managed care arrangements as a more efficient means of providing care to Medicaid beneficiaries, so long as a fee-for-service market exists, policymakers may consider RVS as a viable means of correcting perceived inequities in Medicaid physician payments.





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## **Chapter VI**

### **The Gap between Medicaid Fees and the Medicare Fee Schedule (MFS): Results of a 1993 Medicaid Fee Survey**



## **VI. THE GAP BETWEEN MEDICAID FEES AND THE MEDICARE FEE SCHEDULE (MFS): RESULTS OF A 1993 MEDICAID FEE SURVEY<sup>1</sup>**

### **A. INTRODUCTION**

Since the Medicaid program's inception, policymakers have been concerned with the factors that determine physicians' decisions to participate in Medicaid and the implications of these factors for access. Sloan, Cromwell and Mitchell (1978) were among the first to document the relationships between physician participation in Medicaid and Medicaid fee levels, the level of Medicaid fees relative to other markets, and administrative costs created by Medicaid bureaucratic obstacles. Mitchell (1991) and Perloff et al. (1987) substantiated these results with more recent evaluations which found that physician participation decisions were related to both Medicaid fee levels and Medicaid fee levels relative to other insurance programs. Despite the recognition of the importance of Medicaid fee levels on physician participation decisions, however, relatively little is known about recent changes in Medicaid fees and how they compare to other payers.

Understanding recent changes in Medicaid fees is of particular importance for two reasons. First, through a series of legislative actions beginning with the Omnibus Reconciliation Act (OBRA) of 1987, the federal government has mandated that states provide services to pregnant women and children with incomes up to 133 percent of the federal poverty level. While the Medicaid expansions have provided insurance coverage to a large pool of low income pregnant women and children, these expansions in coverage will only translate into increased access if physician fees are high enough to insure that physicians participate in the Medicaid program. Recognizing this, OBRA 89 required that states provide reimbursement rates adequate to insure access for this growing pool of eligible individuals. However, there is little documentation of the magnitude of increases in

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<sup>1</sup>This chapter was written by Stephen Norton.





Medicaid fees since 1990. While recent concerns regarding access have focused on the most vulnerable populations -- pregnant women and children (Dubay et al. 1993, Kenney and Dubay, 1995) -- these concerns are valid for all Medicaid eligible populations.

Second, many states are now using or are contemplating using the Resource Based Relative Value Scale (RBRVS) for Medicaid reimbursement<sup>1</sup>. States can adopt Medicare's conversion factors, which convert relative values into payment rates. However, the adoption of Medicare conversion factors might be costly for some states. Holahan (1993) found, for example, that the adoption of the Medicare Fee Schedule (MFS) in 1990 would have increased Medicaid costs substantially. Alternatively, states could set their conversion factors to maintain current payment levels. However, in the event that states attempt to maintain budget neutrality and Medicaid fees remain low relative to other payers, states may find themselves in the untenable position of being forced to increase Medicaid fees to assure access.

This study uses Medicaid fees in 1990 and 1993 and information on what fees would be under a fully phased in MFS to provide policymakers with more recent documentation of trends in Medicaid fee levels. Updating work by Holahan (1991), we provide information on the variation in physician fees across the county, describe changes in Medicaid fees between 1990 and 1993, and evaluate 1993 Medicaid physician fees relative to other insurance markets by comparing them to fully phased in MFS fees.<sup>2</sup> Because of recent concern regarding pregnant women and children we focus our attention, where possible, on those services used most by pregnant women and children such as delivery and primary care evaluation and management fees. Because previous work

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<sup>2</sup> HCFA established a five-year transition period to a payment system based on the MFS to avoid precipitous changes in payments and potential disruptions in patient care. As a result, Medicare payments for services in a given year prior to full implementation in 1996 are different than MFS fees. Data issues made it difficult to identify Medicare payments for 1993, so we evaluate the level of Medicaid fees relative to MFS fees fully phased-in.



(Holahan, 1991) indicated that there were significant differences in fee levels by region of the country, we also provide information regarding regional variations in fees.

## **B. DATA COLLECTION AND METHODS**

Medicaid and MFS Fees. A sub-sample of physician services collected in a 1991 Urban Institute survey of Medicaid fees (Holahan, 1991) -- selected on the basis of both Medicaid expenditures and service frequency from 1988 tape-to-tape files in California, Michigan and Tennessee -- were re-surveyed in 1993. States were asked to provide their maximum Medicaid fees for each of the services listed in Table VI.1 for the 1993 fiscal year (see Appendix C for a summary of each states response). In those states which differentiated fees based on geographic location, provider type, specialty type, age of the patient, or site of service, an average of all provided fees was calculated.<sup>3</sup> Three exceptions were made. In Alaska, only fees from the Anchorage area were used because 80 percent of Medicaid claims were from the Anchorage region. In New Mexico, Texas and Minnesota, high risk, nurse practitioner and diagnosis related fees were not used in the computation of an average fee in order to facilitate comparisons with other states. All national and regional fee values are weighted averages, using Medicaid enrollees in each state in 1993 as weights. Weighting by Medicaid enrollees allows us to assess the fees for services provided to the average Medicaid enrollee in a given area.

Table VI.1 displays the list of services surveyed and their CPT-4 codes grouped according to six broad types of physician services, including primary care services, hospital visits, obstetrical

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<sup>3</sup> Thus increase reimbursement for services provided by pediatricians, for example, will be represented in the service fees presented. In total, 11 states -- Hawaii, Indiana, Iowa, Minnesota, Montana, New Jersey, New York, Pennsylvania, Virginia, Washington and Wisconsin, provided different reimbursement rates depending on the age of the patient, and or the physician's specialty.



care, surgery services, imaging services and laboratory tests. Expenditures for each service as a percentage of total expenditures within broad types of physician services in 1988 are also presented to demonstrate the relative importance of each service. As Table VI.1 indicates, the bulk of expenditures for our surveyed services is accounted for by primary care services. For example, 49.2 percent of the expenditures on surveyed services for the non-elderly population are for primary care services. The share of expenditures accounted for by surgical services, however, is relatively small. Table VI.1 also suggests that expenditures on services differ considerably by enrollee group. For example, 80.6 percent of the expenditures on these services for children were for primary care services. For young women ages 15-34, more than 60 percent of total expenditures on surveyed procedures are accounted for by obstetric services.

MFS fees in 1993 were computed using the MFS formula, and represent a fully phased-in fee schedule rate. We used 1993 Relative Value Unit (RVUs) values published in the November 25, 1992 Federal Register. Since the MFS only included RVUs for physician services, RVUs for lab services were computed based on 1993 charges. The charge data used to estimate total RVUs for lab services are from the 1993 Diagnostic Laboratory Fee Schedule National Limits. These data include a list of 1993 laboratory codes and their respective national prevailing charge screens for office-based lab services. RVUs were derived by taking the ratio of the prevailing charge to the 1993 Medicare conversion factor for nonsurgical services. State level Geographic Practice Cost Indices (GPCIs) reflecting congressionally mandated quarter work values were used to adjust the MFS fees.

Crosswalk from 1990 to 1993 Service Definitions. Direct comparison of Medicaid fee data from 1990 and 1993 is problematic because of changes in CPT-4 codes. Effective in 1992, the





definitions for all evaluation and management services, including hospital and office visits, were substantially revised. We used a crosswalk developed by the Health Care Financing Administration (HCFA) to crosswalk 1990 service codes to clinically equivalent 1993 codes. Surveyed services affected by this crosswalk included 3 office visits, a hospital visit and two consultations. Since we did not have data available to crosswalk all of the 1993 codes, it was not possible to accurately link four services (two hospital visits, an office visit, and an emergency department visit) to 1990 codes. These codes included a 30-minute office visit for a new patient (99205), and emergency visit of moderate severity (99283), a 15-minute subsequent hospital care visit (99231) and a 25-minute subsequent hospital care visit (99232). These services are included in our analysis of 1993 fees but not in our comparison of 1990 and 1993 fees.<sup>3</sup> Appendix B explains our crosswalk in more detail.

Summary Measures of Medicaid Fees. In order to evaluate the average fee for state Medicaid programs we computed two measures of average Medicaid fees. The first measure is based on the entire set of survey services and is used in our evaluation of 1993 fees. Surveyed fees for each service were combined in proportion to their Medicaid expenditures and normalized with a national average to create a Medicaid fee index for each state. For the second measure used in our evaluation of the growth in Medicaid fees between 1990 and 1993, we used a sub-sample of fees because we were unable to compare some services between 1990 and 1993.<sup>4</sup>

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<sup>3</sup> In addition, by 1993 the service 69437 was deleted from CPT-4. In order to compare 1990 and 1993 fees for this service, we asked states to provide fees for service 69437-50 which, in 1993, is the clinical equivalent of service 69437.

<sup>4</sup> The average fee was computed with the following 22 procedures: 99203, 99213, 99214, 99244, 99254, 90843, 90844, 93000, 99222, 59410, 59515, 43235, 58120, 58150, 66984, 69437, 70450, 71020, 76805, 81000, 87081, and 88305. Fees for global procedures for obstetrical services were not included because many states did not provide a global fee for these services in 1990. Including these values would inflate the change in fees between 1990 and 1993 considerably. Fees for 99205, 99232, 99231 and 99283 were not included because these fees were not comparable between 1990 and 1993 given available information.



Comparison of MFS and Medicaid Fees. To evaluate changes in Medicaid relative to MFS fees, fee indices reflecting Medicaid fees as a proportion of MFS fees were computed for individual services, for each type-of-service and for all services. A simple ratio was taken between the Medicaid and MFS fees to evaluate differences by service. A summary measure of relative fees for 1993 by type-of-service was created by multiplying the Medicaid to MFS fee ratios for each service by the expenditure weights developed in Table VI.1 within each type-of-service. Similarly the Medicaid to MFS fee ratio across all survey services was computed by combining the fees based on the expenditure weights in Table VI.1.

Limitations. Some results presented should be interpreted with caution. Variation in Medicaid surgical fees is likely to reflect both varying state reimbursement rates as well as differences in global surgical packages. Moreover, in three states, we had insufficient information to compare changes in Medicaid fees between 1990 and 1993. In Rhode Island, 1990 Medicaid fee data was unavailable. For Texas, 1990 fee data from Holahan (1991) was for Harris county alone, whereas the 1993 Medicaid fee data we collected was for all of Texas. In Alaska, fee data for 1993 are Anchorage, Alaska fee data. For these three states, comparisons between 1990 and 1993 are thus inappropriate. In addition, caution should be used when comparing 1993 Alaska fees with other states because 1993 fee data in Alaska is not a statewide value.

In addition, to the extent that the HCFA crosswalk does not reflect actual changes in the way physicians code services, some of the differences in fees for primary care services and hospital visits between 1990 and 1993 may reflect changes in the service code definition. Second, more current tape-to-tape data was not available to recompute expenditures weights based on current utilization patterns. Thus, Table VI.1 is likely to underrepresent the proportion of expenditures in the Medicaid



population for certain services which we were unable to crosswalk completely, such as 99205, 99283, 99231, and 99232.

### C. RESULTS

Variation in 1993 Medicaid Fees. Table VI.2 presents the national average fee weighted by enrollees in each state, the maximum and minimum fee, and the coefficients of variation for each service in our survey across all states. In general, the coefficients of variation are quite high, suggesting that there is a great deal of variation in what states pay for a given service. The magnitude of this variation, however, differs by type-of-service. The variation in fees for obstetrical care is relatively small, but still suggests considerable differences across states. The coefficients of variation for primary care services are moderate, with an electrocardiogram (99203) and a 25-minute office visit for established patients (99214) having the lowest coefficient of variation. With regard to hospital visits and surgery, the variance in fees is somewhat higher. Fees for imaging services exhibit considerable variation as well.

Table VI.3 illustrates the variation in Medicaid fees across regions and states in terms of a normalized average enrollee weighted Medicaid fee.<sup>5</sup> The East South Central, South Atlantic and West South Central regions have the highest Medicaid fees. The lowest average fees occur in the Middle Atlantic and East North Central regions. Across states, average fee index values range from a low of 0.49 in New Jersey, to 1.45 in Alabama, a more than twofold variation across states. Alabama, the District of Columbia, Georgia, Kentucky, Louisiana, Maryland, Massachusetts, Montana, Nevada, Virginia, Washington, West Virginia, and Wyoming all had Medicaid fee indices

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<sup>5</sup> National and regional values are weighted using 1992 Medicaid enrollees for each state from 1992 HCFA Form 2082 data.





Percent of Expenditures for Procedures Included in the 1993 Fee Survey within Each Type of Service Category, by Eligibility Group, using 1988 Medicaid Expenditure Data for 4 States

	All					
	Non-Elderly	Infants	Children	Young Women	Non-Elderly Adults	Disabled
<b>Primary Care</b>	<b>49.19%</b>	<b>66.24%</b>	<b>80.62%</b>	<b>23.74%</b>	<b>61.45%</b>	<b>58.20%</b>
99203 Office Visit, New Patient, 30 minutes	10.44%	18.92%	13.66%	11.53%	10.59%	3.45%
99205 Office Visit, New Patient, 60 minutes	3.83%	2.72%	2.64%	7.31%	5.34%	2.41%
99213 Office Visit, Est Patient, 15 minutes	59.48%	66.41%	67.07%	57.11%	59.09%	47.48%
99214 Office Visit, Est Patient, 25 minutes	7.10%	5.39%	6.98%	7.56%	7.29%	6.95%
99244 Office Consult, New or Est, 60 minutes	3.16%	3.10%	1.64%	3.24%	4.54%	4.94%
99283 EM Visit, New or Est, moderate severity	2.88%	2.99%	2.82%	4.23%	2.17%	2.35%
90843 Psychiatric, 20 to 30 Minutes	2.63%	0.01%	0.84%	1.67%	1.27%	7.37%
90844 Psychiatric, 45 to 50 Minutes	8.21%	0.08%	3.90%	5.67%	4.73%	20.94%
93000 Electrocardiogram	2.26%	0.39%	0.45%	1.67%	4.98%	4.13%
<b>Hospital Visits</b>	<b>11.61%</b>	<b>24.85%</b>	<b>7.63%</b>	<b>4.63%</b>	<b>15.03%</b>	<b>24.64%</b>
99222 Initial Hospital Care, New or Est, 50 minutes	22.18%	26.46%	27.97%	31.88%	19.59%	16.78%
99231 Subs Hospital Care, New or Est, 15 minutes	37.33%	36.81%	31.15%	30.18%	36.27%	41.82%
99232 Subs Hospital Care, New or Est, 25 minutes	27.06%	28.47%	23.52%	21.30%	25.58%	29.73%
99254 Initial Inp Consultation, 80 minutes	13.40%	8.26%	17.36%	16.65%	18.55%	11.67%
<b>Obstetrical Care</b>	<b>26.36%</b>	<b>0.33%</b>	<b>1.49%</b>	<b>60.18%</b>	<b>6.31%</b>	<b>1.89%</b>
59400 Total Obstetric Care/Vaginal Delivery	45.44%	35.49%	49.54%	46.92%	42.37%	42.37%
59410 Vaginal Delivery Only	21.71%	21.83%	21.98%	22.29%	18.06%	19.20%
59515 Cesarean Delivery and postpartum Care	12.33%	27.16%	11.81%	11.36%	15.56%	14.43%
59510 Total Obstetric Care/Cesarean Delivery	20.53%	15.52%	16.67%	19.43%	24.00%	23.99%
<b>Surgery</b>	<b>4.15%</b>	<b>1.41%</b>	<b>3.18%</b>	<b>1.98%</b>	<b>7.34%</b>	<b>6.62%</b>
43235 Upper GI Endoscopy	22.73%	4.22%	4.39%	17.41%	33.52%	32.98%
58120 Dilatation and Curettage	16.95%	0.00%	0.61%	44.53%	15.01%	5.75%
58150 Total Hysterectomy	22.89%	0.00%	0.14%	35.47%	33.14%	10.62%
66984 Cataract Removal/Lens Implant	21.04%	0.37%	1.19%	1.66%	17.85%	47.88%
69437 Tympanostomy	16.31%	95.41%	93.66%	0.93%	0.48%	2.77%
<b>Imaging</b>	<b>6.70%</b>	<b>6.44%</b>	<b>4.93%</b>	<b>7.68%</b>	<b>7.07%</b>	<b>6.68%</b>
70450 CAT Scan, Head or Brain	10.85%	16.38%	17.63%	2.59%	17.26%	23.80%
71020 X-Ray, Chest, Two Views	42.76%	83.62%	77.82%	12.39%	69.65%	70.89%
76805 Echography, Pregnant Uterus	46.33%	0.00%	4.55%	85.02%	13.09%	5.31%
<b>Laboratory Tests</b>	<b>2.00%</b>	<b>0.73%</b>	<b>2.16%</b>	<b>1.79%</b>	<b>2.81%</b>	<b>1.96%</b>
81000 Urinalysis Routine	39.18%	19.25%	36.70%	35.32%	49.43%	48.26%
87081 Culture, Bacterial, Screening Only	24.24%	65.24%	55.23%	16.95%	11.99%	6.83%
88305 Surgical Pathology	36.34%	15.51%	8.07%	47.73%	38.58%	44.91%

Figures in bold represent the proportion of expenditures for surveyed procedures attributable to the broad type-of-service categories  
Other values represent the proportion of expenditures by broad type-of-service group attributable to each procedure within that group.





TABLE VI.2

## Variation Across States in Medicaid Fees For Survey Procedures, 1993

Code	Description	Mean	Maximum	Minimum	CV
<b>Primary Care</b>					
99203	Office Visit, New Patient, 30 minutes	\$35.50	\$76.03	\$11.00	34.06
99205	Office Visit, New Patient, 60 minutes	52.83	125.00	18.00	43.81
99213	Office Visit, Est Patient, 15 minutes	21.81	76.03	11.00	31.11
99214	Office Visit, Est Patient, 25 minutes	30.86	80.00	15.00	28.93
99244	Office Consult, New or Est, 60 minutes	67.02	200.00	24.00	40.58
99283	EM Visit, New or Est, moderate severity *	30.89	116.00	8.00	44.44
90843	Psychiatric, 20 to 30 Minutes **	27.86	80.00	11.83	40.75
90844	Psychiatric, 45 to 50 Minutes	47.48	110.00	18.00	34.34
93000	Electrocardiogram	23.65	69.00	13.00	30.66
<b>Hospital Visits</b>					
99222	Initial Hospital Care, New or Est, 50 minutes	52.88	111.00	14.17	43.50
99231	Subs Hospital Care, New or Est, 15 minutes	21.49	84.00	6.75	45.77
99232	Subs Hospital Care, New or Est, 25 minutes	26.70	61.50	6.75	41.41
99254	Initial Inp Consultation, 80 minutes	66.70	200.00	20.00	41.49
<b>Obstetrical Care</b>					
59400	Total Obstetric Care/Vaginal Delivery	1,001.29	1,500.00	435.50	19.39
59410	Vaginal Delivery Only	636.09	1,150.00	296.00	26.39
59515	Cesarean Delivery and postpartum Care	724.85	1,600.00	417.50	30.32
59510	Total Obstetric Care/Cesarean Delivery	1,095.89	2,592.36	557.00	22.57
<b>Surgery</b>					
43235	Upper GI Endoscopy	197.88	450.00	80.00	33.53
58120	Dilation and Curettage	174.20	550.00	60.00	41.72
58150	Total Hysterectomy	659.81	2,200.00	240.00	37.13
66984	Cataract Removal/Lens Implant	927.64	3,000.00	440.00	39.34
69437	Tympanostomy	184.00	621.00	66.00	50.44
<b>Imaging</b>					
70450	CAT Scan, Head or Brain	179.91	651.26	43.20	35.42
71020	X-Ray, Chest, Two Views	20.20	154.21	13.38	46.32
76805	Echography, Pregnant Uterus	83.55	173.19	30.00	29.45
<b>Laboratory Tests</b>					
81000	Urinalysis Routine	4.02	8.18	1.20	30.39
87081	Culture, Bacterial, Screening Only	7.51	16.23	1.35	28.78
88305	Surgical Pathology	43.93	116.00	10.85	42.62

\*\* Two states - Wisconsin and Oregon -- did not cover a 20 to 30 minute psychiatric visit (90843)

\* One state - the District of Columbia -- did not cover an emergency visit for a new or established patient of moderate severity (99283)



Medicaid Fee Index for All Services, and Medicaid Fees for Selected Survey Procedures, 1993

Region	State Name	All Services		Office Visit		Office Visit		Global	
		Medicaid Fee Index		New Patient Proc 99203	Est Patient Proc 99213	Global Vaginal Delivery	Cesarean Delivery		
National Average		1.00		\$35.50	\$21.81	\$1,001.29	\$1,095.89		
New England									
	Connecticut	0.89		25.58	22.65	925.32	1,025.45		
	Maine	1.12		26.00	19.50	910.00	1,663.00		
	Massachusetts	0.81		24.77	22.36	909.00	909.00		
	New Hampshire	1.21		41.00	34.56	1,316.00	1,361.00		
	Rhode Island	1.02		36.00	25.00	1,000.00	1,000.00		
	Vermont	0.69		18.00	18.00	750.00	750.00		
		0.92		27.00	21.00	945.00	945.00		
Middle Atlantic									
	New Jersey	0.86		13.72	12.83	922.62	946.74		
	New York	0.49		19.50	15.00	435.50	557.00		
	Pennsylvania	0.93		11.00	11.00	1,037.00	1,037.00		
		1.06		22.50	22.50	1,092.50	1,092.50		
South Atlantic									
	Delaware	1.16		39.70	27.10	1,105.54	1,234.82		
	District of Columbia	0.98		34.00	21.00	981.00	981.00		
	Florida	1.37		30.00	25.00	1,500.00	1,550.00		
	Georgia	1.03		35.00	25.00	1,000.00	1,000.00		
	Maryland	1.35		51.24	30.26	1,200.00	1,605.00		
	North Carolina	1.24		37.00	31.00	1,317.00	1,370.00		
	South Carolina	1.15		47.01	26.53	1,160.50	1,266.00		
	Virginia	0.96		30.00	20.00	990.00	990.00		
	West Virginia	1.32		30.00	24.20	1,200.00	1,441.00		
		1.28		52.50	40.50	897.50	1,238.83		
East South Central									
	Alabama	1.20		35.01	25.93	1,186.64	1,274.16		
	Kentucky	1.45		28.47	26.75	1,500.00	1,500.00		
	Mississippi	1.33		39.00	30.00	1,310.00	1,310.00		
	Tennessee	0.86		28.48	18.33	852.98	935.27		
		1.15		40.00	27.00	1,100.00	1,300.00		
West South Central									
	Arkansas	1.09		45.15	27.73	1,106.66	1,157.37		
	Louisiana	1.00		59.00	33.00	940.00	940.00		
	Oklahoma	1.28		36.00	27.00	1,234.00	1,474.00		
	Texas	1.02		34.97	30.70	1,000.00	1,100.00		
		1.08		47.57	26.87	1,108.97	1,108.97		



which were 20 percent greater than the national weighted average fee. The states with the lowest fees were Hawaii, Illinois, Maine, Michigan, Mississippi, New Jersey, Ohio, Rhode Island, and Utah. These fees were less than the national average by 14 percent or more.<sup>6</sup>

In addition, Table VI.3 provides detailed information on the variation in fees for selected primary care and obstetrical services which together account for over 50 percent of the Medicaid expenditures for those services used in the computation of the Medicaid fee index. Regionally, New England, the Middle Atlantic and West North Central have the lowest fees for a 30-minute office visit for a new patient (99203) and the West South Central, Mountain and Pacific regions have the highest fees. Across states, the fee for a 30-minute office visit for a new patient (99203) in Hawaii was almost six times that for the same service in New York. States with the highest fees for a 30 minute office visit (99203) were in Arkansas, Georgia, Washington, and West Virginia. The lowest fees were in Missouri, New York, New Jersey, Pennsylvania, and Rhode Island. In general, these results were similar with regards to a 15-minute office visit for an established patient (99213).

Despite exhibiting relatively lower variation than the primary care services, variation in the obstetrical fees presented in Table VI.3 is considerable as well. Across regions, the lowest fees for a global vaginal delivery (59400) are concentrated in the New England, Middle-Atlantic, and East North Central areas, whereas the South Atlantic and East and West South Central regions had, on average, the highest fees for this service. Across states, the difference between the high and low fees for vaginal (59400) global deliveries is considerable. Alabama, the District of Columbia, Massachusetts, Kansas and Kentucky have relatively high fees. On the other hand, Hawaii, New

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<sup>6</sup>A deflated index not presented in this analysis indicates that there is even greater variation in Medicaid fees after adjusting for differences in the cost of practice. This results from the fact that a number of states with high fee index values are in regions which are characterized by relatively low practice costs. Conversely, many states with low fee index values are in areas with relatively high costs of practice.





Change in Medicaid Fee for all Services and Selected Services, 1990-1993

State Name	All Services			Office Visit, Established Patient 30 Minutes (99203)						Vaginal Delivery Only (59410)			
	1990	1993	Percentage Change	1990	1993	Percentage Change	1990	1993	Percentage Change	1990	1993	Percentage Change	
	Fee	Fee		Fee	Fee		Fee	Fee		Fee	Fee		
National Average													
	\$123.39	\$138.97	13.67%	\$30.74	\$35.21	20.2%	\$526.71	\$639.83	25.8%				
New England													
Connecticut	127.00	142.03	11.30	34.54	33.99	-1.3%	520.58	597.26	7.4%				
Maine	135.09	157.28	16.43%	27.50	26.00	-5.5%	609.70	609.70	0.0%				
Massachusetts	99.04	93.84	-5.26%	23.25	24.77	6.5%	500.00	450.00	-10.0%				
New Hampshire	128.80	146.80	13.98%	42.00	41.00	-2.4%	433.00	592.00	36.7%				
Rhode Island	145.42	154.61	6.32%	35.00	36.00	2.9%	810.00	810.00	0.0%				
Vermont	na	na	na	na	na	na	na	na	na				
	119.90	129.75	8.21%	26.00	27.00	3.8%	625.00	688.00	10.1%				
Middle Atlantic													
New Jersey	102.15	108.57	7.0%	13.57	13.72	1.1%	574.68	613.90	12.6%				
New York	73.46	74.45	1.34%	20.75	19.50	-6.0%	320.00	296.00	-7.5%				
Pennsylvania	111.70	113.25	1.38%	11.00	11.00	0.0%	679.00	690.00	0.0%				
	89.95	146.78	63.19%	18.00	22.50	25.0%	312.50	800.00	156.0%				
South Atlantic													
Delaware	149.46	172.48	21.2%	29.75	39.70	53.0%	631.94	835.53	44.6%				
District of Columbia	106.32	138.30	30.08%	20.05	34.00	69.6%	500.00	680.00	36.0%				
Florida	165.56	168.16	1.57%	30.00	30.00	0.0%	900.00	900.00	0.0%				
Georgia	140.15	156.57	11.71%	35.00	35.00	0.0%	500.00	800.00	60.0%				
Maryland	203.92	198.58	-2.62%	32.10	51.24	59.6%	901.00	901.00	0.0%				
North Carolina	152.72	161.11	5.49%	21.00	37.00	57.0%	895.00	895.00	0.0%				
South Carolina	129.92	156.25	20.26%	31.26	47.01	76.2%	550.00	738.50	34.3%				
Virginia	142.61	133.03	-6.72%	30.00	30.00	0.0%	700.00	700.00	0.0%				
West Virginia	171.15	203.66	18.99%	27.00	30.00	11.1%	670.00	864.00	29.0%				
	86.39	250.39	189.83%	10.00	52.50	425.0%	330.00	1,121.88	240.0%				
East South Central													
Alabama	123.54	171.36	38.0%	28.99	35.01	25.9%	534.94	828.08	60.1%				
Kentucky	140.84	201.87	43.33%	22.50	28.47	26.5%	700.00	1,150.00	64.3%				
Mississippi	139.89	198.22	41.69%	24.00	39.00	62.5%	650.00	900.00	38.5%				
Tennessee	106.63	121.39	13.84%	22.00	28.48	29.5%	531.20	575.05	8.3%				
	111.79	162.99	45.80%	40.00	40.00	0.0%	382.50	725.00	100.0%				
West South Central													
Arkansas	141.81	164.26	16.6%	33.67	40.52	22.2%	607.17	726.45	21.3%				
Louisiana	115.18	154.35	34.02%	42.00	59.00	40.5%	367.08	452.00	23.1%				
Oklahoma	159.03	180.24	13.34%	36.00	36.00	0.0%	760.00	860.00	13.2%				
Texas	132.24	145.01	9.66%	24.00	34.97	45.7%	525.00	700.00	33.3%				
	na	na	na	na	na	na	na	na	na				



TABLE VI.4(continued)

State Name	All Services			Office Visit, Established Patient 30 Minutes (99203)			Vaginal Delivery Only (59410)		
	1990	1993	Percentage Change	1990	1993	Percentage Change	1990	1993	Percentage Change
	Fee	Fee		Fee	Fee		Fee	Fee	
<b>East North Central</b>									
Illinois	114.39	126.86	11.8%	25.20	30.61	23.5%	455.51	542.50	22.6%
Indiana	123.25	126.88	2.94%	25.05	25.05	0.0%	550.00	550.00	0.0%
Michigan	164.52	166.49	1.20%	36.30	33.21	-8.5%	591.60	591.60	0.0%
Ohio	99.86	116.14	16.31%	25.30	35.89	41.5%	380.79	540.00	41.8%
Wisconsin	100.14	113.74	13.58%	22.06	31.21	41.5%	400.00	500.00	25.0%
	110.97	147.62	33.03%	22.51	29.66	31.8%	371.99	590.74	58.8%
<b>West North Central</b>									
Iowa	123.73	143.50	17.0%	26.03	28.83	9.3%	454.23	630.44	40.0%
Kansas	151.35	169.49	11.98%	28.32	31.35	10.7%	644.32	761.49	18.2%
Minnesota	118.37	153.14	29.37%	25.00	25.00	0.0%	450.00	900.00	100.0%
Missouri	159.00	173.47	9.10%	30.00	35.20	17.3%	457.93	607.20	32.6%
Nebraska	88.41	105.00	18.77%	20.00	20.00	0.0%	390.00	550.00	41.0%
North Dakota	113.82	140.40	23.36%	32.38	39.34	21.5%	441.00	507.00	15.0%
South Dakota	120.97	137.31	13.51%	30.00	41.00	36.7%	400.00	500.00	25.0%
	121.66	149.67	23.02%	28.40	31.70	11.6%	346.50	444.00	28.1%
<b>Mountain</b>									
Colorado	129.54	152.65	19.7%	38.54	39.75	3.4%	505.24	603.20	25.2%
Idaho	118.01	127.33	7.90%	32.75	35.00	6.9%	487.65	520.84	6.8%
Montana	165.23	168.05	1.71%	41.33	44.57	7.8%	700.00	700.00	0.0%
Nevada	109.14	175.39	60.71%	48.02	51.13	6.5%	419.20	726.75	73.4%
New Mexico	196.79	206.51	4.94%	47.46	47.50	0.1%	824.73	828.29	0.4%
Utah	*31.49	159.02	20.94%	34.22	36.02	5.3%	476.39	510.24	7.1%
Wyoming	95.91	126.47	31.86%	39.30	36.85	-6.2%	325.16	567.02	74.4%
	145.30	198.62	36.70%	50.00	50.98	2.0%	525.00	787.50	50.0%
<b>Pacific</b>									
Alaska	114.56	116.85	2.2%	44.51	46.81	7.3%	474.70	501.45	6.7%
California	na	na	na	na	na	na	na	na	na
Hawaii	114.59	112.54	-1.79%	46.00	46.00	0.0%	480.60	480.60	0.0%
Oregon	129.77	145.23	11.92%	53.69	60.70	13.1%	291.20	472.80	62.4%
Washington	134.32	133.64	-0.51%	39.74	40.93	3.0%	611.33	573.23	-6.2%
	107.83	146.63	35.98%	30.88	52.91	71.3%	424.68	674.95	58.9%
Minimum	73.46	74.45	-5.72%	10.00	11.00	-8.5%	291.20	296.00	-1.0%
Maximum	203.92	250.39	189.83%	53.69	60.70	425.0%	901.00	1,150.00	240.0%
CV	20.50	23.48		36.03	32.94		27.03	26.71	



Jersey, Rhode Island and South Dakota have surprisingly low fees for vaginal deliveries. The District of Columbia's fee for a vaginal delivery is more than three times that of the fee in New Jersey. With a few exceptions, fees for a global cesarean delivery follow similar patterns. Most notable, while Connecticut's fee for a vaginal delivery is below the national average, their fee for a global cesarean delivery is almost \$600 higher than the national average.

Two other findings should be noted. First, states with higher than average Medicaid fee index values do not necessarily have higher fees for both primary care services and obstetrical services. The District of Columbia, for example, has relatively high fees for obstetric services, but lower than average fees for a 30-minute office visit for a new patient (99203). Similarly, the state of Virginia provides fees for a 30-minute office visit for a new patient, which is relatively low, yet the fees provided for obstetrical services in Virginia are considerably higher than the national average. Second, almost all states allowed global billing in 1993 for obstetrical services. While previous surveys of Medicaid fees found that several states paid for pre- and postpartum visits on a per visit basis, almost all states now provide physicians with the opportunity to bill on a global basis.

Change in Medicaid Fees 1990-1993. We computed the percent change in the average Medicaid fee for all services in 1990 and 1993. Table VI.4 presents this information. As can be seen, from the national perspective the average Medicaid fee increased approximately 14 percent between 1990 and 1993 across the US. However, there is considerable variation in growth rates across both regions and states. Regionally, the Middle Atlantic and Pacific areas experienced very small growth in fees. The South Atlantic and East South Central regions experienced the greatest increases in Medicaid fees.



Across states, the largest increases in the average Medicaid fee occurred in Montana, Pennsylvania, and West Virginia. These states were well below the national average level in 1990. By 1993, however, these states were well above the national average (See columns 1 and 2 in Table VI.4). This illustrates that some states with relatively low average Medicaid fees in 1990 increased their fees substantially by 1993. On the other hand, some states did not match this growth. In Maine, Georgia, South Carolina, California and Oregon, average Medicaid fees actually declined between 1990 and 1993. Most important, some of the smallest increases (or actual decreases) in the average Medicaid fee occurred in some of the larger states which, in 1990, had relatively low average fees compared to the national average (See columns 1 and 2 in Table VI.4). For example, California, New Jersey, and New York experienced small increases or actual decreases in average Medicaid fees across the study period, and as a result remained well below the national average fee in 1993.

Table VI 4 also provides growth rates in fees between 1990 and 1993 for two important Medicaid services likely affected by OBRA legislation requiring adequate fee levels to insure access: a 30-minute office visit with an established patient (99203) and a routine vaginal delivery (59410). On average across the nation, Medicaid fees increased by over 25 percent for a vaginal delivery only and 20.2 percent for a 30-minute office visit for an established patient. The Middle Atlantic and Mountain regions experienced the smallest increase in fees for a 30-minute office visit for an established patient (99203). In New England the fees for this service on average decreased. In general, states in the South Atlantic increased their fees the most for this service. With regard to fees for a vaginal delivery only, the New England and Pacific regions experienced the smallest





increase in fees and states in the East South Central experienced, on average, the largest growth in fees for this service.

Across states, two states more than doubled their fees for a vaginal delivery, Pennsylvania and West Virginia. Roughly 50 percent of the states increased their fees by at least 25 percent. However, 11 states did not increase their fees. With regard to a 30 minute office visit for an established patient (99203), over 50 percent of the states increased their fees by at least 15 percent. Delaware, Georgia, Kentucky, Maryland, North Carolina, West Virginia, and Washington all increased their fee for this service by over 50 percent.

1993 Medicaid Fees Relative to MFS Fee Levels. While our results suggest that Medicaid physician fees have grown considerably between 1990 and 1993, it is important to determine the level of Medicaid fees relative to other payers. For this purpose, we examine the relationship between 1993 Medicaid and fully phased-in MFS fees across all services and by broad type-of-service groups. Table VI.5 presents the ratio of Medicaid to MFS fee indices weighted by Medicaid enrollees across all services and by type-of-service. The first column suggests that Medicaid fees across the US are roughly 73 percent of comparable MFS fees. However, there was considerable variation in this relationship across both regions and states. The New England, Middle Atlantic and Pacific regions had fees for all surveyed Medicaid services that were less than 65 percent of comparable MFS fees. On average states in the East South Central had the highest fees relative to MFS fees.

Across states, Arkansas, Nebraska, West Virginia and Wyoming had Medicaid fees that were 10 percent higher than MFS fees for a similar group of services. For most states, however, the Medicaid fee index was considerably less than a comparable MFS fee index. For example, New



TABLE VI.5

Medicaid to Medicare Fee Ratios for All Services and by Type-of-Service, 1993

Region	State Name	All Services	Primary Care	Hospital Visits	Surgery	Lab Services	Imaging Services	Obstetric Care
National Average		0.73	0.68	0.57	1.00	0.77	0.80	0.88
New England	Connecticut	0.62	0.62	0.42	0.74	0.61	0.56	0.67
	Maine	0.61	0.53	0.46	0.85	0.59	0.56	1.02
	Massachusetts	0.63	0.67	0.41	0.58	0.66	0.46	0.62
	New Hampshire	0.90	0.97	0.61	1.04	0.72	0.85	0.75
	Rhode Island	0.78	0.77	0.66	0.69	0.68	0.55	1.11
Middle Atlantic	Vermont	0.47	0.47	0.31	0.61	0.52	0.43	0.51
		0.72	0.66	0.53	0.65	1.31	0.76	0.97
Middle Atlantic	New Jersey	0.42	0.36	0.19	0.48	0.38	0.47	0.76
	New York	0.42	0.41	0.30	0.48	0.51	0.43	0.42
	Pennsylvania	0.38	0.31	0.14	0.43	0.33	0.43	0.82
		0.69	0.62	0.35	0.89	0.52	0.82	1.07
South Atlantic	Delaware	0.90	0.85	0.72	1.18	0.82	0.87	1.16
	District of Columbia	0.72	0.64	0.62	1.04	0.71	0.86	0.89
	Florida	0.69	0.64	0.41	0.73	0.43	0.74	1.06
	Georgia	0.78	0.74	0.59	0.94	0.60	0.82	1.00
	Maryland	1.07	1.01	1.02	1.21	1.06	1.05	1.37
	North Carolina	0.80	0.82	0.31	0.70	0.72	0.52	1.16
	South Carolina	0.94	0.90	0.90	0.99	0.82	0.94	1.13
	Virginia	0.70	0.67	0.26	0.97	0.62	0.60	1.03
	West Virginia	0.95	0.79	0.86	1.87	1.38	0.93	1.33
		1.44	1.36	1.26	2.85	1.06	1.27	1.53
East South Central	Alabama	0.94	0.86	0.63	1.32	1.00	1.03	1.23
	Kentucky	0.91	0.84	0.64	1.06	0.36	0.72	1.62
	Mississippi	1.08	0.98	0.72	2.16	1.13	1.01	1.29
	Tennessee	0.74	0.67	0.65	0.73	1.06	1.05	0.89
		0.97	0.90	0.57	1.25	1.27	1.21	1.15
West South Central	Arkansas	0.92	0.88	0.84	1.07	0.98	0.96	1.03
	Louisiana	1.14	1.14	0.96	1.54	1.13	1.27	0.92
	Oklahoma	0.96	0.85	0.75	1.32	1.03	1.11	1.32
	Texas	0.92	0.94	0.65	0.94	1.02	0.67	1.08
		0.88	0.85	0.89	0.98	0.95	0.94	0.96



TABLE VI.5 (continued)

Region	State Name	All Services	Primary Care	Hospital Visits	Surgery	Lab Services	Imaging Services	Obstetric Care
East North Central	Illinois	0.68	0.62	0.50	1.07	0.71	0.80	0.76
	Indiana	0.62	0.56	0.37	0.97	0.65	0.70	0.78
	Michigan	0.95	0.84	0.92	1.77	1.20	0.98	1.02
	Ohio	0.62	0.61	0.61	0.74	0.51	0.62	0.62
	Wisconsin	0.63	0.57	0.31	1.06	0.70	0.86	0.72
		0.84	0.75	0.66	1.45	0.87	1.17	0.86
West North Central	Iowa	0.79	0.68	0.61	1.19	0.89	1.16	0.97
	Kansas	0.81	0.64	0.64	1.73	1.01	0.85	1.22
	Minnesota	0.76	0.61	0.33	1.14	1.29	1.16	1.14
	Missouri	0.95	0.82	1.03	1.54	0.83	1.26	1.07
	Nebraska	0.56	0.52	0.27	0.62	0.66	0.62	0.77
	North Dakota	1.15	0.90	0.75	1.24	1.06	3.49	0.81
	South Dakota	0.91	0.85	0.98	1.14	0.98	1.21	0.85
		0.90	0.77	0.93	1.74	1.15	1.21	0.92
Mountain	Colorado	0.87	0.80	0.66	1.26	1.11	0.97	0.99
	Idaho	0.74	0.73	0.46	0.86	1.03	0.71	0.85
	Montana	1.01	0.99	0.68	1.15	1.02	0.99	1.21
	Nevada	0.95	0.84	0.90	1.22	1.03	1.08	1.32
	New Mexico	1.06	0.94	0.87	1.82	1.19	1.33	1.23
	Utah	0.89	0.75	0.62	1.59	1.53	1.34	0.93
	Wyoming	0.77	0.75	0.71	1.15	0.77	0.63	0.81
		1.10	0.98	0.98	1.94	1.23	1.23	1.28
Pacific	Alaska	0.64	0.61	0.55	0.91	0.78	0.70	0.66
	California	1.79	1.92	1.16	2.46	0.93	1.74	1.36
	Hawaii	0.59	0.54	0.54	0.90	0.79	0.68	0.61
	Oregon	0.86	0.82	0.87	1.56	0.81	0.89	0.67
	Washington	0.71	0.62	0.60	1.08	0.90	0.84	0.89
		0.89	0.96	0.47	0.72	0.72	0.68	1.01
	Minimum	0.38	0.31	0.14	0.43	0.33	0.43	0.42
	Maximum	1.79	1.92	1.26	2.85	1.53	3.49	1.62
	CV	29.56	31.51	43.86	40.92	33.28	37.71	30.07





Jersey, New York, and Rhode Island all paid Medicaid fees that were 50 percent below MFS fees for the same group of services.<sup>7</sup>

Although in general Medicaid fees for surveyed services were considerably lower than MFS fees, there is some variation in the relationship between Medicaid and MFS fee levels by type-of-service. From a national perspective, Medicaid fees for primary care services were 68 percent of MFS fees, slightly less than that for all services. The Middle Atlantic region had fees for primary care services that were less than 50 percent of comparable MFS fees. Across states, New Jersey, New York, and Rhode Island, had Medicaid fees for primary care services that were less than 50 percent of MFS fees. These results are consistent with previous work which showed that 1990 Medicaid fees for primary care services were considerably lower than Medicare allowed charges (Holahan, 1991). However, three states including Arkansas, Georgia, and West Virginia had Medicaid fees for primary care services that were higher than MFS fees. From the national perspective, Medicaid paid 57 percent of MFS fees for hospital visits. Nonetheless, there were a few Medicaid programs that paid higher fees for hospital visits compared to MFS fees, including Georgia, Minnesota and West Virginia.

The level of Medicaid relative to MFS fees for surgical services, obstetrical care, and imaging tests were much higher than for primary care services. On average, Medicaid fees for surveyed surgical services were equivalent to MFS fees. The East South Central region paid 32 percent more than the MFS for these services. However, two regions, New England and the Middle Atlantic, had fees for surgical services that were less than 80 percent of comparable MFS fees.

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<sup>7</sup> In New York, the very low value of fees relative to MFS fees is, in part, attributable to extremely high practice cost expenses recognized in the MFS.



Across states, Medicaid fees in two states, New York and New Jersey, were less than half of MFS fees.

From the national perspective, Medicaid fees for obstetrical care were on average roughly 88 percent of MFS fees. With the exception of the New England, Middle Atlantic, East North Central, and Pacific regions, all areas had fees for obstetric services which were on average at least 97 percent of comparable MFS fees. While over half of the states set obstetric fees that were higher than fully phased-in MFS fees, states with the largest Medicaid programs had relatively low fees. Five states, including Alabama, Georgia, Louisiana, Virginia and West Virginia set Medicaid fees that were 30 percent higher than MFS levels. However, New Jersey, and California had fees which were 61 percent or less than MFS fees.

#### D. CONCLUSIONS

Perhaps the most important result of this study is that there has been considerable growth in Medicaid fees between 1990 and 1993. From the national perspective, Medicaid fees for all services in our survey increased approximately 14 percent between 1990 and 1993. These results are similar to those reported by PPRC (1994) and may reflect states' attempts to insure adequate access to primary care and obstetric physician services for Medicaid enrollees. Medicaid fees for a vaginal delivery increased over 25 percent between 1990 and 1993. Similarly, Medicaid fees for a 30-minute office visit for an established patient increased on average by 20.2 percent. Despite an average increase, however, Medicaid fees decreased over the time period in two large states (California and New York).



Another important finding is that there exists considerable variation in Medicaid fee levels and, as a result, the generosity of fee levels relative to the MFS across regions, states, and by type-of-service. The New England, Middle Atlantic, East North Central, and Pacific regions had the lowest 1990 Medicaid fees on average, experienced the lowest growth in fees and as a result had 1993 Medicaid fees which were low relative to MFS fees. Within these regions, however, there were some exceptions to these trends. Massachusetts, Indiana, and Pennsylvania for example, all experienced higher growth in Medicaid fees than the other states within their region and had 1993 Medicaid fees which were higher relative to comparable MFS fees. Similarly, the South Atlantic and East South Central regions experienced on average the greatest growth in Medicaid fees and also had high Medicaid fees relative to MFS fees in 1993. However, some states within the South Atlantic region did not have fees that were high relative to the MFS. South Carolina, for example, experienced an actual decline in average Medicaid fees between 1990 and 1993 and had fees that were 70 percent of comparable MFS fees.

In our type-of-service analysis, we found that Medicaid fees for most services remain below comparable MFS fees. On average, Medicaid fees for obstetrical services are 88 percent of MFS fees. Medicaid fees for surgical services were on average roughly equivalent to MFS, in part a result of the shift in surgical fees inherent in the MFS. However, the ratio of Medicaid to MFS fees for primary care services was low in comparison to the ratio of Medicaid to MFS fees for obstetrical care and surgical services.

There are two important policy implications of these results. First, there remains reason for some concern regarding access to physician services for Medicaid eligibles. From the national perspective, Medicaid fees on average were 73 percent of MFS fees. Medicaid fees for primary care



and obstetric services remain much lower than the MFS fees. Although individual states may have considerably increased fees for these services, fees paid for these services provided to the average Medicaid enrollee are relatively low. The magnitude of the difference between the MFS and Medicaid fees for primary services is in part a function of attempts by HCFA to increase reimbursement for primary care services for the Medicare population and in part a function of the fact that Medicaid fees for primary care have not grown as quickly as fees for obstetrics. While we were unable to compare Medicaid fees to actual Medicare payments, these results provide some guidance for policy makers. Given Medicaid fee levels which are relatively low compared to a fully phased-in MFS, and previous research which suggests that physicians' decisions to participate in Medicaid are a function of relative market fee levels, newly eligible Medicaid enrollees may continue to face access problems in some areas. It is important to note that those areas with relatively low fees are concentrated in the New England, Middle Atlantic and Pacific regions where a significant portion of Medicaid eligibles reside.

Second, as was shown in earlier work (Holahan, Wade and Gates, 1993), these updated results suggest that requiring states to increase Medicaid fees to approximate MFS fees would have a differential effect across regions and among states, given the variation in 1993 Medicaid fee levels. Those states, primarily in the Southeast, which currently pay physicians relatively well would be less affected by such a policy than states with low fees. Those states with low fees, including many states in New England, the Middle Atlantic and East North Central regions, would experience large increases in program costs in the absence of offsetting factors. While surgical service fees under Medicaid are virtually equivalent to MFS fees, primary care services are on average less than 70 percent of fully phased-in MFS fees, suggesting that the largest increase to program costs would





result from requiring states to adopt the MFS for primary care services. However, while costly, states may be forced to adopt these payment levels to insure access to primary care services.



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## **Appendix A**

### **Estimating RVUs for Physician Services**





## BACKGROUND

Any broad health care reform initiative will include changes in how payers determine what they will pay for individual physician services. The implementation of the Medicare Fee Schedule based on a resource-based relative value scale (RBRVS) may represent the first major step toward comprehensive revision of payment methodologies. Under RBRVS, relative physician fees are set on the basis of relative resource costs. These relative costs are then transformed into payment rates through the application of a multiplicative conversion factor (CF) that sets the payment amount for each relative value unit (RVU).<sup>1</sup>

If payers other than Medicare implement RBRVS, they are likely to set their own conversion factor to reflect their objectives regarding overall levels of payments. In principle, some public health care authority might be empowered to set an all-payer conversion factor based on negotiations or to meet some goals regarding desired levels of physician spending. No matter what course health care reform takes, using RBRVS outside of Medicare will require that payers or policymakers be able to determine the current level of physician payments. In an RBRVS context, this means being able to calculate the CF that would be revenue neutral relative to current payment methodologies. Although a revenue-neutral CF may not be the ultimate objective of all RBRVS payment systems, it is likely to be an important starting point from which to make further refinements.

The concept of a revenue-neutral conversion factor,  $CF_i$ , for any given service  $i$  is quite straightforward. It is the ratio of the current average payment rate,  $P_i$  to the number of RVUs assigned to that service in RBRVS,  $RBRV_i$ . Algebraically, this can be expressed as  $CF_i = P_i / RBRV_i$ . With service-specific CFs computed in this way, the payment rate for service  $i$  under RBRVS would

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<sup>1</sup> Medicare also varies payments geographically in order to reflect differences in practice costs across the country.



be the same as under current approaches. A CF that is revenue neutral across all services, would be equal to the ratio of total spending under current payment rates to the total volume of RVUs represented by the services provided. Using  $Q_i$  to represent the quantity of service  $i$ , we can write:

$$RNCF = \sum P_i * Q_i / \sum RBRV_i * Q_i.$$

This computation requires information on both payment rates and total service quantities for each payer, by geographic area. Complete data of this type do not exist.

An alternative formulation of the RNCF can help to ease some of these data constraints.

Expressing  $P_i$  as the product of  $CF_i$  and  $RBRV_i$ , the formula for RNCF can be written as:

$$RNCF = \sum (CF_i * [RBRV_i * Q_i / \sum RBRV_i * Q_i]).$$

This representation shows that the RNCF can be computed as the weighted average of the service-specific CFs, where the weights are the shares of total RVUs the service accounts for within a payer's service mix as opposed to the total service quantities. Although we still need the individual payment rates to compute  $CF_i$ , being able to rely on RBRVs shares instead of exact quantities will make the assumptions needed to move ahead with available data sources more credible. Specifically, one such assumption may be that RBRVs shares are uniform across payers or areas; an assumption that seems more reasonable than an analogous one related to volume.



In order to be able to derive revenue-neutral CFs for non-Medicare payers, we must be able to attach an RBRV to each service.<sup>2</sup> For most services, this means assigning the RVU that appears in the Medicare RBRVS to the non-Medicare service. This is appropriate because the Medicare RBRVS was developed to be applied to services used by any patient population, not simply the elderly.

However, there are a number of medical services for which HCFA did not develop RVUs, including clinical laboratory services and services typically provided to younger patients such as preventive medicine visits, neonatal visits, obstetrical services, and elective plastic surgery. Therefore, in cases where there are no RVUs provided for a particular service, we separately impute work, practice expense, and malpractice expense RVUs.

This technical note reviews the steps involved in assigning RVUs from the Medicare RBRVS to non-Medicare services. First, we discuss the development of a single consistent set of RVUs from the several years of Medicare RBRVSs that exist. Second, we outline a methodology for imputing RVUs for physician services that are not currently part of the Medicare payment system, but presumably would have to be included in a payment system that applied to non-Medicare payers. Finally, we focus on incorporating clinical laboratory services into RBRVS, even though they are not currently paid for through the Medicare RBRVS methodology.

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<sup>2</sup> In order to compute conversion factors and simulate the impacts of an all-payer fee schedule, it is necessary to assign RVUs (work, malpractice, and practice expense) to all of the services reported in the sources of private payer data we are using in this study. The sources of private payer data we are using in this study include the 1993 Health Insurance of America (HIAA) Prevailing Health Care Charge Systems data for medical and surgical services, one major commercial insurer, a company who compiles claims from numerous large employers, and a large national employer. Due to data use agreements, more of these insurers, claims processors, or employers are identified by name.



## ESTIMATING RVUS FOR PHYSICIAN SERVICES

### Developing a Single Source of RVUs

The 1993 MFS served as the basis for the all-payer fee schedule since the private payer data we used primarily reflect medical claims processed in 1993. However, we use all of the published RVU data to capture the numerous additions and deletions to CPT codes over the 1990 through 1994 period. Specifically, we combine elements of the 1990 Model Fee Schedule and the 1992, 1993, and 1994 Fee Schedules to form of single scale of work, malpractice, and practice expense RVUs.

By incorporating the 1992 MFS, we gain RVUs for services deleted in 1993 yet still reported in our databases. The 1994 MFS captures RVUs for 19 services which were previously designated as "carrier-priced" services in the both the 1992 and 1993 Fee Schedules (RVUs were not used to pay for these services). Finally, we use the 1990 Model Fee Schedule to establish RVU values for radiology services which were deleted from CPT in 1992, but are still reported in our private payer databases.<sup>3</sup> In cases where 1990, 1992 or 1994 RVUs are used, the work, practice expense and malpractice expense RVUs are rescaled so all values are on the same scale as the 1993 MFS. This adjustment thereby offsets any modification HCFA made to the RVUs in 1993 or 1994 in order to maintain budget neutrality in the implementation of revisions to the RBRVS.

For the remaining services which do not have reported RVUs we estimate RVUs using an approach which relies on relative charges among services with and without RVUs. The imputation process is based on the available RVUs within a type of service category. This process is described

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<sup>3</sup> The radiology work values reported in the Model Fee Schedule are based on values provided by the American College of Radiology (ACR). These values are based on a relative value scale developed by the ACR, which conducted both surveys of radiologists and a consensus panel process for refinement and extrapolation of survey-generated values. In order to integrate the radiology fee schedule into the physician fee schedule, HCFA rescaled all of the radiology RVUs. In addition, since there were no malpractice and practice expense RVUs reported in the Model Fee Schedule, imputed values were provided to us by HCFA staff.





in detail below. However, for evaluation and management codes which were deleted in 1992 and still reported in the 1993 data sources, we estimate work, practice expense, and malpractice RVUs by crosswalking the deleted code to a clinically equivalent 1992 CPT code. The algorithm we use for this crosswalk was developed by HCFA and is described in the 1992 MFS (pp. 59580-59581).

### **Imputing Work, Malpractice, and Practice Expense RVUs**

Table A.1 includes a list of services which were reported in the 1993 HIAA data and do not have an RBRVS RVU from any of the Medicare fee schedules. The types of services that do not have RVUs include clinical laboratory services (e.g., urinalysis tests), selected eye exams (e.g., contact lens fitting), and elective plastic surgery procedures (e.g., rhinoplasty). These services in aggregate, represent less than 10 percent of the total charges in the HIAA Medical and Surgical Prevailing Health Care Charge System (PHCS) for 1993.

The approach we use to gap-fill or impute RVUs relies on the relationship between charges and RVUs within a type of service category. In order to define reasonably homogenous groups of services, we use a narrowly defined type of service classification system to assign services to a unique type of service category. The type of service classification scheme (TOS) we use is listed in Table 3. Because this classification system was generally developed for use with Medicare data, we have modified this scheme slightly to include a further level of disaggregation of services which are frequently performed on younger patients. For example, there are additional service categories defining preventive medicine services, newborn care, and vaginal deliveries. Finally, in order to maintain an even greater level of homogeneity, we define separate categories for the professional and global components of radiology services.

Within these small homogenous categories of services, we assume the information about the average work, practice expense, and malpractice RVU for the service category could be used to



provide information about the RVUs for other related services. Therefore, we use the relationship between average charges and RVUs at the type of service level to impute the RVUs for services in the category without RVUs. In effect, we assume that the same ratio of RVUs to charges that applies to those services within the category that have RVUs, also applies to those services within the category that do not have RVUs.

By using average charges and RVUs at the type of service level, we minimize the possibility of introducing into the computed RVUs distortions due to a single RVU or charge anomaly. Since we are imputing work RVUs, practice expense RVUs, and malpractice expense RVUs, we develop three separate charge to RVU ratios and compute each RVU separately. In summary, the following formula is used to impute RVUs:

$$\text{Imputed RVU} = \frac{\text{Mean RVU for all services in the TOS with reported RVUs}}{\text{Mean charge for services in the TOS with reported RVUs}} \times \text{Mean charge for service in the TOS without a reported RVU}$$

We know that charge data vary across geographic areas because of, in part, differences in physicians' costs of providing services. In order to capture relative price differentials across services, therefore, prior to computing the mean charges we deflate Medicare locality-level charges by the relevant Medicare geographic practice cost index (GPCI).

Since we are using several sources of charge data, it was necessary to select one database from which to develop an estimated RVU. Selecting the appropriate data source involved considering whether there was sufficient number of claims to be confident that the mix of services included in the data reflect services typically provided to non-Medicare beneficiaries and that the charges were generally representative of the market. This suggests that a desirable source of charge



data should not be skewed toward any geographic area (to avoid distortion in service mix) or toward any single insurer (to avoid potentially payer-specific charge patterns).

We selected the 1993 HIAA Prevailing Health Care Charge System to serve as the basis for imputing RVUs since it contains charge data across most geographic areas and is based on the claims submitted to over 150 payers. These data consist of the provider's billed fees or total submitted charges for 3,026 medical services and 4,840 surgical services in 1993. Data are provided from contributors in all 50 states and the District of Columbia and are based on 30 million claims for surgical services and 85 million records for medical services. We use the mean HIAA submitted charge to impute RVUs separately for physician work, practice expense and malpractice expense of each service.

Except for the distinction between the professional component and global component of radiology services, the HIAA data does not demarcate payment modifiers. Since RVUs for the global radiology service are equal to the sum of the professional and technical components, we use the imputed values for the global and professional services to estimate RVUs for the technical component of the service. The RVUs are derived separately for the malpractice and practice expense components of each service. However, because there is no physician work associated with the technical portion of the service, work RVUs are not estimated.

### **Estimating RVUs for Clinical Laboratory Services**

Clinical laboratory services are not paid under the MFS and are therefore not assigned RVUs. Because Medicare does not generally use RVUs to pay for these services, it is not possible to impute





RVUs for laboratory services using the process we use to estimate values for physician services.<sup>4</sup> Instead, we compute charge-based total RVUs for each laboratory service and do not separately estimate malpractice and practice expense RVUs for these services. Further, since there is no physician work associated with these services, work RVUs are also not derived.

The charge data we used to estimate total RVUs for lab services are from the 1993 Diagnostic Laboratory Fee Schedule National Limits. These data include a list of 1993 laboratory codes and their respective national prevailing charge screens. The national prevailing charge screens define separate payment rates according to where the service is provided, e.g., a physician office or a hospital outpatient lab. In 1993, services provided in a physician's office were reimbursed at 60 percent of the median prevailing charge while services provided in a hospital outpatient lab were reimbursed at 62 percent of the median prevailing charge.

We use the payment rates for office-based laboratory services to impute charge-based RVUs. These RVUs are derived by taking the ratio of the prevailing charge to the 1993 Medicare conversion factor for nonsurgical services (\$31.249). Using this approach, we imputed total RVUs for all 1993 laboratory codes listed in the national laboratory fee schedule. Because we are only able to estimate RVUs for 1993 CPT codes, these imputed values serve as the basis for deriving total RVUs for all other laboratory services reported in the HIAA data (e.g., those laboratory codes deleted from the 1993 version of CPT-4).

Laboratory codes in the HIAA Medical PHCS that do not have charge-based RVUs are listed in Table 2. In order to estimate RVUs for these services, we impute RVUs using the same approach

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<sup>4</sup> Although there are 20 clinical laboratory services defined in the Fee Schedule as physician services and therefore assigned RVUs, there was not enough RVU data in each laboratory service group to impute RVUs using the method described above.



used to derive RVUs for physician services. The primary difference in the imputations, however, is that only the total RVU is imputed.

## RESULTS

Tables 1 and 2 include a list of CPT codes and their respective estimated work, malpractice, and practice expense RVUs for services not included in the MFS. Table A.1 includes a list of imputed values for physician services, and Table A.2 provides a list of imputed values for clinical laboratory services. We imputed RVUs for 260 physician services and 298 laboratory services which in aggregate, account for less than 10 percent of total submitted medical and surgical charges in the 1993 HIAA data. The remainder of the services reported in the database were directly assigned RVUs from the MFS. Work, malpractice, and practice expense RVUs were therefore assigned to all physician and clinical laboratory services.

We reviewed the estimated work, malpractice, and practice expense RVUs for internal consistency by comparing them to the RVUs for services within the same type of service group as well as to services in different types of service groups. For purposes of this comparison, we used all of the published RVU data, including the preliminary work RVUs for 200 services included in the proposed MFS for 1994.<sup>5</sup>

We specifically examined the relationship between work, malpractice, and practice expense RVUs and the level or "intensity" of the service for CPT codes with RVU values from the MFS and

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<sup>5</sup> The preliminary work values published in the proposed 1994 MFS are for services not included in the Medicare physician fee schedule but are commonly used by other payers and were developed in order to facilitate the adoption of the RBRVS by other payers. These codes are currently defined as noncovered, carrier priced, or bundled under Medicare and include for example, elective plastic surgery procedures such as removal of face wrinkles and hair transplants (not covered by Medicare), specialized heart procedures such as repair of great vessels chamber (carrier-priced under Medicare), drawing blood (bundled under Medicare), and preventive medicine visits (not covered by Medicare). These values were not included in the Final Rule for 1994.



compared these relationships to similar CPT-4 codes with imputed RVU values. In addition, we also assessed the magnitude of the RVU increase as the level or "intensity" of the service increased (e.g., how much did the RVUs increase when the level of a new patient visit increases from a 10 minute to 20 minute visit?). These comparisons were investigated across all three components of the total RVUs including work, malpractice, and practice expense. For example, the imputed RVUs for each level of preventive medicine visits were compared to the RVUs for levels of new and established office visits as well as to other types of evaluation and management services.

Overall, the estimated RVUs seem reasonable. However, there were 11 codes where the estimated RVUs seemed either too high or too low, compared to the RVUs for similar services. These services are listed in Table A.4. Services with aberrant values include the "old" new and established preventive medicine visit codes and an "old" critical care visit code. (These "old" visit codes were deleted from CPT-4 in 1992 and replaced by new codes). Preventive medicine visits are defined in CPT-4 in terms of the patient's age and whether the patient is new or established. In order to understand the relationship between physician work and the level of service (as defined by the age of the patient), we used the proposed work values from the 1994 MFS. These work values were also used to assess how physician work varies by patient status, e.g., new or established.

The 1994 proposed work values for preventive medicine services demonstrate an increasing trend between physician work and patient age- as the age of the patient increases, physician work also increases. Given this trend, we assumed that the values for the practice expense and malpractice expense components of the total RVUs should also increase as the level of the service increases.

The imputed values for both the new and established patient preventive medicine codes, which were deleted from CPT in 1992 (90750-90754 and 90760-90764), do not reflect this pattern.



These results are shown in Table A.4. In some cases, the estimated physician work values increase with patient age, while in other cases, they decrease. For example, the work RVUs for treating new patients 12-17 years of age are less than the imputed work RVUs for treating new patients 1-4 years of age (0.78 and 0.82 work RVUs, respectively). With regard to the established patient preventive medicine visit codes, although the work values increased as the level of the service increased, the magnitude of the increase was not consistent with the increase in RVUs for similar services reported in the proposed 1994 MFS. For instance, the imputed RVUs for established patients 1-4 and 5-11 years of age were 0.65 and 0.67, respectively. On the other hand, the proposed 1994 values for similar codes were 0.65 for patients 1-4 years old and 0.71 for patients 5-11 years old.

The imputed RVUs for the 1992 preventive medicine services are consistent with the trends demonstrated in the proposed rule. This is true for both new and established preventive medicine visit codes- as patient age increases, the RVUs also increase. Since the coding descriptors for the 1992 preventive medicine codes remained generally consistent with earlier codes, we use the imputed values for the 1992 codes to modify or replace the RVUs for the pre-1992 codes.<sup>6</sup> More specifically, we crosswalked the imputed RVUs (work, malpractice, and practice expense RVUs) from the 1992 code to the clinically equivalent pre-1992 code. Since there are three codes in 1992 which define patients over the age of 18 (only one code previously defined this age range), we averaged the estimated values and assigned the mean RVU value for work, malpractice, and practice expense to the pre-1992 code. The RVUs for the practice expense and malpractice expense RVUs were similarly adjusted.

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<sup>6</sup> Although most evaluation and management codes underwent substantial definitional changes in 1992, the preventive medicine codes remained generally unchanged. In the pre-1992 period, there were two separate series of codes which defined services for new or established patients. There were 5 patient age ranges delineated in each series of codes: age<1, 1-4 years, 5-11 years, 12-17 years, and age>18. In 1992, all the age levels were identical except for codes defining patients over 18 years of age. This code was expanded to include separate codes for three age ranges (18-39 years, 40-64 years, and 65 years and over).





Finally, we modified the RVUs for a brief follow-up critical care visit (CPT code 99171) since the work, malpractice, and practice expense values for this code were greater than the estimated RVUs for the limited critical care visit. The imputed physician work RVUs were 1.20 for the brief visit and 1.13 for the limited visit. We adjusted the imputed RVUs for the brief visit by increasing its estimated RVUs to reflect the fact that RVUs increase as the level of the service increases. More specifically, we calculated the average increase in imputed work RVUs across all levels of follow-up critical care visits and reduced the RVUs for the brief visit so that they would be consistent with the average increase in RVUs across levels of follow-up visits. The difference in the adjusted RVUs for a brief visit compared to a limited visit is therefore consistent with the difference in work for an intermediate visit compared to an extended visit. The RVUs for the practice expense and malpractice expense components were similarly adjusted.

## SUMMARY

We have described in detail a process to expand the MFS to payers other than Medicare. In general, this expansion reflects the addition of RVUs for clinical laboratory services and other services not considered part of the Medicare payment system. It includes for example, RVUs for neonatal and preventive care services, elective plastic surgery procedures, and immunotherapy visits.

The methods we use to derive RVUs separately estimate RVUs for the work, malpractice, and practice expense components of the MFS, each of which are needed to calculate payment rates and revenue-neutral conversion factors. We thoroughly reviewed the estimated values for face validity and concluded that the values were generally reasonable. There were, however, 12 codes where the imputed values were questionable. The imputed RVUs for these services were adjusted so they are consistent with the RVUs for similar services.



The development of a single source of RBRVS RVUs is an important and necessary step in implementing and simulating the impact of the RBRVS payment system for payers other than Medicare. By assigning RVUs to all of the physician services and clinical laboratory services reported in private payer databases, it is possible to derive budget-neutral CFs for non-Medicare payers.



Table A.1: Detailed Type of Service Categories

IMAGING	
<p>I.1. <u>Standard Imaging</u></p> <p>I1a. Chest</p> <p>I1b. Musculoskeletal</p> <p>I1c. Breast</p> <p>I1d. G.I. Tract</p> <p>I1e. Nuclear Medicine</p> <p>I1f. Other</p> <p>I.2. <u>Advanced Imaging</u></p> <p>I2a. CT Scans-Head</p> <p>I2b. CT Scans-Other</p> <p>I2c. MRI-Brain</p> <p>I2d. MRI-Other</p>	<p>I.3. <u>Sonography</u></p> <p>I3a. Ophthalmic Ultrasound</p> <p>I3b. Echography-Abdomen</p> <p>I3c. Echo-cardiography</p> <p>I3d. Cerebrovascular</p> <p>I3e. Echography-prostate, transrectal</p> <p>I3f. Other</p> <p>*I3g. Echography-uterus</p> <p>I.4. <u>Imaging/Procedure</u></p> <p>I4a. Cardiac Catheterization</p> <p>I4b. Other Imaging/Procedure</p>
EVALUATION AND MANAGEMENT	
<p>M1. <u>Office Visits</u></p> <p>M1a. New</p> <p>M1b. Established</p> <p>M2. <u>Hospital</u></p> <p>M2a. Initial</p> <p>M2b. Subsequent</p> <p>M2c. Critical Care</p> <p>M3. <u>Emergency Room</u></p> <p>(No breaks)</p> <p>M4. <u>Home/Nursing Home</u></p> <p>M4a. Home</p> <p>M4b. Nursing Home</p>	<p>M5. <u>Specialist Evaluation and Management</u></p> <p>M5a. Pathology</p> <p>M5b. Psychiatry</p> <p>M5c. Ophthalmology</p> <p>M5d. Other</p> <p>*M5e. Newborn Care</p> <p>*M5f. Allergy and Immunology</p> <p>M6. <u>Consultations</u></p> <p>(No breaks)</p> <p>M7. <u>Preventive Medicine</u></p> <p>(No breaks)</p>
PROCEDURES	
<p>P1. <u>Major Procedures--General</u></p> <p>P1a. Breast</p> <p>P1b. Colectomy</p> <p>P1c. Cholecystectomy</p> <p>P1d. TURP</p> <p>P1e. Hysterectomy</p> <p>P1f. Laminectomy</p> <p>P1g. Other</p> <p>*P1h. Delivery-C-Sections</p> <p>*P1i. Delivery-Vaginal</p> <p>*P1j. OB/Gyn-Other</p>	<p>P5. <u>Ambulatory Procedures-Other</u></p> <p>P5a. Skin</p> <p>P5b. Musculoskeletal</p> <p>P5c. Hernia Repair</p> <p>P5d. Lithotripsy</p> <p>P5e. Other</p> <p>*P5f. OB/Gyn-Other</p>





Table A.1 (continued)

<p>P2. <u>Major Procedures--Cardiovascular</u>  P2a. CABG  P2b. Abdominal Aortic Aneurysm Repair  P2c. Thromboendarterectomy  P2d. Coronary Angioplasty  P2e. Pacemaker Insertion  P2f. Other</p> <p>P3. <u>Major Procedures-Orthopedic</u>    P3a. Femoral Fracture Repair  P3b. Hip Replacement  P3c. Knee Replacement  P3d. Other</p> <p>P4. <u>Ambulatory Procedures-Eye</u>  P4a. Corneal Transplant  P4b. Cataract Extractions  P4c. Retinal Detachment  P4d. Treatment of Retinal Lesions  P4e. Other</p> <p>P6. <u>Minor Procedures</u>  P6a. Skin  P6b. Musculoskeletal  P6c. Other  *P6d. OB/Gyn-Other</p>	<p>P7. <u>Oncology</u>  P7a. Radiation Therapy  P7b. Other</p> <p>P8. <u>Endoscopy</u>  *P8a. Arthroscopy-Other  P8b. Upper G.I. Endoscopy  P8c. Sigmoidoscopy  P8d. Colonoscopy  P8e. Cystoscopy  P8f. Bronchoscopy  P8g. Laparoscop Cholecystect.  P8h. Laryngoscopy  P8i. Endoscopy - Other  *P8j. Arthroscopy-Knee  *P8k. Endoscopy-Nasal-Sinus  *P8l. Endoscopy-Laparoscopy  *P8m. Endoscopy-Hysteroscopy  *P8n. Endoscopy-Colposcopy</p>
TESTS	
<p>T1. <u>Clinical Laboratory Tests</u>  T1a. Routine venipuncture  T1b. Automated general profiles  T1c. Urinalysis  T1d. Blood counts  T1e. Blood glucose  T1f. Stand Bacterial Cultures  T1g. Other  *T1h. Pap Smear</p>	<p>T2. <u>Other Tests</u>  T2a. Electrocardiograms  T2b. Cardiovascular Stress Tests  T2c. ECG Monitoring  T2d. Other</p>
UNCLASSIFIED SERVICES	
<p>Y1. Unclassified CPT codes  Z1. Unclassified local codes  Z2. Unclassified alpha codes</p>	

\* Additions to original narrowly defined type-of-service classification system.



Table A.2  
Imputed Physician Work, Practice Expense, and Malpractice Expense RVUs for Physician Services

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
10003		Drainage of skin abscess	0.52	0.91	0.05	1.49
10020		Incision and drainage of furuncle	0.33	0.58	0.03	0.95
10100		Drainage of skin abscess	0.36	0.63	0.04	1.03
10101		Drainage of skin abscess	0.51	0.88	0.05	1.44
11950		Therapy for contour defects, 1 cc or less	1.16	2.01	0.12	3.29
11951		Therapy for contour defects, 1.1 to 5.0 cc	1.60	2.79	0.16	4.55
11954		Therapy for contour defects, over 10.0 cc	0.63	1.09	0.06	1.78
11975		(Re)insert contraceptive cap	2.10	3.66	0.21	5.97
11976		Removal of contraceptive cap	1.08	1.88	0.11	3.07
15850		Removal of sutures	0.27	0.32	0.03	0.63
15877		Suction assisted lipectomy	8.67	10.36	1.11	20.14
17380		Hair removal by electrolysis	0.28	0.50	0.03	0.81
21085		Prepare face/oral prosthesis	2.16	2.89	0.29	5.34
30410		Reconstruction of nose, complete	13.45	14.09	1.89	29.43
30420		Reconstruction of nose, including septal repair	17.45	18.28	2.45	38.18
36468		Injection(s); spider veins	0.73	1.27	0.07	2.07
36495		Insertion of implantable intravenous	5.89	4.77	0.94	11.60
41820		Excision, gum, each quadrant	2.14	3.17	0.22	5.53
41821		Otoplasty	2.21	3.27	0.22	5.70
41823		Excision of fibrous tuberosities	2.72	4.03	0.27	7.02
41828		Excision of osseous tuberosities	1.58	2.34	0.16	4.08
41830		Removal of gum tissue	1.94	2.87	0.19	5.00
41874		Repair tooth socket	1.45	1.62	0.24	3.30
47135		Transplantation of liver	73.82	82.16	12.00	167.98
58970		Retrieval of oocyte	5.12	5.23	1.07	11.42
58972		Fertilization of oocyte	4.82	7.19	0.89	12.90
58974		Transfer of embryo, any method	1.63	1.66	0.34	3.63
58976		Gamete or zygote intrafallopian transfer	6.91	7.05	1.44	15.41
65771		Radial keratotomy	10.88	6.88	0.59	18.36
66702		Ciliary body destruction	7.12	4.50	0.39	12.01
69090		Pierce earlobes	0.20	0.30	0.02	0.53
69300		Revise external ear	9.09	10.11	1.48	20.67
74300		X-ray bile ducts, pancreas	0.48	0.36	0.04	0.88
76092		Mammogram, screening	0.83	0.41	0.07	1.31
76092	26	Mammogram, screening	0.11	0.41	0.02	0.54
76140		X-ray consultation	0.41	0.22	0.03	0.67
76140	26	X-ray consultation	0.10	0.22	0.01	0.33
76150		Xeroradiography	0.09	0.19	0.01	0.30
76350	26	Special x-ray contrast study	0.17	0.37	0.02	0.57



Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
77336	26	Continuing medical radiation	0.77	0.39	0.06	1.23
77370	26	Special medical radiation	1.15	0.59	0.09	1.83
77400		Daily megavoltage treatment management	0.83	0.42	0.07	1.31
77401	26	Superficial and/or ortho voltage	0.41	0.21	0.03	0.65
77402	26	Single treatment area, single port	0.52	0.27	0.04	0.83
77403		Radiation treatment; 6-10 MeV	0.54	0.28	0.04	0.86
77404		Radiation treatment; 11-19 MeV	0.88	0.45	0.07	1.40
77405		Daily megavoltage treatment management	0.91	0.46	0.07	1.45
77406		Radiation treatment; 20 MeV or greater	0.63	0.32	0.05	1.00
77407	26	Radiation treatment delivery; up to 5 MeV	0.67	0.34	0.05	1.07
77408		Radiation treatment delivery; 6-10 MeV	0.69	0.35	0.06	1.09
77409		Radiation treatment delivery; 11-19 MeV	0.76	0.39	0.06	1.21
77410		Daily megavoltage treatment management	1.00	0.51	0.08	1.58
77411		Daily megavoltage treatment management; 20 MeV +	0.73	0.37	0.06	1.16
77412	26	Radiation treatment delivery; up to 5 MeV	0.72	0.37	0.06	1.15
77413		Radiation treatment delivery; 6-10 MeV	0.88	0.45	0.07	1.40
77414		Radiation treatment delivery; 11-19 MeV	0.85	0.43	0.07	1.34
77416		Radiation treatment delivery; 20 MeV +	0.73	0.37	0.06	1.17
77417	26	Therapeutic radiology port film(s)	0.39	0.20	0.03	0.62
78990		Provide radioisotope(s)	2.37	0.42	0.16	2.96
78990	26	Provide radioisotope(s)	0.19	0.42	0.03	0.64
79300		Radiation therapy	1.82	1.91	0.26	3.99
79900		Provide radioisotope(s)	1.71	0.87	0.14	2.71
85060		Blood smear interpretation	0.22	0.32	0.02	0.56
86299		Hepatitis a antibody test	0.28	0.20	0.02	0.50
90225		History & exam of normal newborn	0.70	2.07	0.22	2.99
90282		Normal newborn services	0.35	1.03	0.11	1.48
90590		Direct advanced life support	0.70	1.44	0.06	2.20
90701		Dip immunization	0.15	0.22	0.02	0.39
90702		Dx immunization	0.10	0.14	0.01	0.25
90703		Tetanus immunization	0.09	0.13	0.01	0.23
90704		Mumps immunization	0.16	0.24	0.02	0.43
90705		Measles immunization	0.15	0.22	0.02	0.39
90706		Rubella immunization	0.17	0.25	0.02	0.43
90707		Mmr virus immunization	0.25	0.37	0.02	0.64
90708		Measles-rubella immunization	0.18	0.27	0.02	0.48
90709		Rubella & mumps immunization	0.19	0.28	0.02	0.49
90712		Oral poliovirus immunization	0.13	0.19	0.01	0.32
90713		Polomyelitis immunization	0.15	0.22	0.02	0.39
90714		Typhoid immunization	0.13	0.19	0.01	0.33



Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
90717		Yellow fever immunization	0.24	0.35	0.02	0.62
90718		Td immunization	0.09	0.14	0.01	0.24
90719		Diphtheria immunization	0.13	0.20	0.01	0.35
90724		Influenza immunization	0.09	0.13	0.01	0.22
90725		Cholera immunization	0.10	0.15	0.01	0.26
90726		Rabies immunization	0.54	0.80	0.05	1.39
90727		Plague immunization	0.14	0.21	0.01	0.36
90728		Beg immunization	0.29	0.43	0.03	0.74
90731		Hepatitis b immunization	0.21	0.31	0.02	0.53
90732		Pneumococcal immunization	0.13	0.19	0.01	0.32
90733		Meningococcal immunization	0.22	0.33	0.02	0.58
90737		Influenza b immunization	0.17	0.25	0.02	0.44
90741		Passive immunization, isg	0.15	0.22	0.01	0.38
90742		Special passive immunization	0.31	0.46	0.03	0.80
90750		Preventive medicine visit; new patient, 18 years+	0.69	1.41	0.07	2.17
90751		Preventive medicine visit; new patient, 12-17 years	0.46	0.95	0.05	1.46
90752		Preventive medicine visit; new patient, 5-11 years	0.46	0.94	0.05	1.44
90753		Preventive medicine visit; new patient, 1-4 years	0.43	0.89	0.04	1.36
90754		Preventive medicine visit; new patient, under 1 year	0.42	0.86	0.04	1.32
90755		Infant care to one year of age	0.40	0.68	0.03	1.11
90757		Newborn care, in other than hospital	0.44	1.30	0.14	1.87
90760		Preventive medicine visit; est. patient, 18 years+	0.62	1.05	0.05	1.72
90761		Preventive medicine visit; est. patient, 12-17 years	0.43	0.74	0.04	1.21
90762		Preventive medicine visit; est. patient, 5-11 years	0.42	0.71	0.03	1.16
90763		Preventive medicine visit; est. patient, 1-4 years	0.39	0.65	0.03	1.07
90764		Preventive medicine visit; est. patient, under 1 year	0.37	0.63	0.03	1.03
90774		Administration and medical interp of tests	0.52	0.68	0.05	1.26
90778		Circadian respiratory pattern	2.58	0.95	0.23	3.77
90831		Telephone consultation with or about	0.41	1.10	0.05	1.56
90841		Psychotherapy, time unspecified	0.49	1.34	0.06	1.89
90849		Special family therapy	0.48	1.30	0.06	1.83
90882		Environmental manipulation	0.46	1.26	0.06	1.78
90889		Preparation of report	0.54	1.46	0.07	2.07
90918		ESRD related services, month (patient under 2 years old)	2.26	1.79	0.19	4.24
90920		ESRD related services, month (patient 12-19 years of age)	2.22	1.76	0.19	4.17
90921		ESRD related services, month (patient 20 years+)	2.63	2.09	0.22	4.93
90922		ESRD related services, per day	0.11	0.09	0.01	0.20
90941		Hemodialysis, for acute renal failure	1.97	1.56	0.17	3.70
90988		Supervision of hemodialysis in hospital	1.63	1.30	0.14	3.06
90989		Dialysis training/complete	4.72	3.75	0.40	8.87





Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
90990		Hemodialysis training and/or counsel	1.13	0.89	0.10	2.12
90992		Peritoneal dialysis training and/or	2.78	2.21	0.24	5.23
90993		Dialysis training/incomplete	1.85	1.47	0.16	3.48
90994		Supervision of chronic ambulatory	2.26	1.79	0.19	4.24
90995		ESRD related services, month	2.45	1.94	0.21	4.60
90998		ESRD related services, day	0.10	0.08	0.01	0.19
92015		Determine refractive state	0.12	0.13	0.01	0.25
92310		Contact lens fitting	0.75	0.80	0.03	1.59
92314		Prescription of contact lens	0.74	0.79	0.03	1.57
92340		Fitting of spectacles, monofocal	0.57	0.60	0.03	1.19
92341		Fitting of spectacles, bifocal	0.73	0.78	0.03	1.55
92342		Fitting of spectacles, multifocal	1.05	1.12	0.05	2.21
92370		Repair & adjust spectacles	0.68	0.73	0.03	1.44
92390		Supply of spectacles	0.73	0.52	0.06	1.31
92391		Supply of contact lenses	0.72	0.51	0.06	1.29
92531		Spontaneous nystagmus study	0.26	0.34	0.03	0.62
92532		Positional nystagmus study	0.27	0.36	0.03	0.65
92533		Caloric vestibular test	0.40	0.52	0.04	0.96
92534		Optokinetic nystagmus	0.29	0.38	0.03	0.69
92551		Pure tone hearing test, air	0.21	0.08	0.02	0.31
92559		Group audiometric testing	0.61	0.23	0.05	0.89
92560		Bekesy audiometry, screen	0.29	0.11	0.03	0.43
92590		Hearing aid exam, one ear	1.04	0.38	0.09	1.51
92591		Hearing aid exam, both ears	1.17	0.43	0.10	1.70
92592		Hearing aid check, one ear	0.49	0.18	0.04	0.71
92593		Hearing aid check, both ears	0.55	0.20	0.05	0.80
92594		Electro hearing aid test, one	0.58	0.21	0.05	0.85
92595		Electro hearing aid test, both	0.69	0.26	0.06	1.01
93300		Echocardiography, m-mode	2.95	0.59	0.24	3.77
93309		Echocardiography, m-mode and real time	4.64	0.92	0.37	5.94
93621		Electrophysiology evaluation	20.85	16.88	3.33	41.06
93623		Stimulation, pacing heart	3.94	3.19	0.63	7.76
93660		Tilt table evaluation	2.93	3.85	0.31	7.08
93784		Ambulatory bp monitoring	2.98	1.10	0.27	4.34
93786		Ambulatory bp recording	0.25	0.09	0.02	0.36
93788		Ambulatory bp analysis	1.59	0.59	0.14	2.32
93790		Review/report bp recording	1.32	0.49	0.12	1.93
93950		Non-invasive studies of extremity ve	1.91	0.70	0.17	2.78
93960		Quantitative venous flow studies (eg	1.97	0.73	0.18	2.87
94642		Aerosol inhalation treatment	0.56	0.84	0.06	1.46



Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
94700		Blood gas analysis	0.59	0.22	0.05	0.86
94772		Breath recording, infant	2.58	0.95	0.23	3.77
95120		Immunotherapy, one antigen	0.28	0.18	0.01	0.48
95125		Immunotherapy, many antigens	0.33	0.21	0.01	0.55
95130		Immunotherapy, insect venom	0.48	0.31	0.02	0.81
95131		Immunotherapy, 2 insect venoms	0.63	0.41	0.03	1.07
95132		Immunotherapy, 3 insect venoms	0.76	0.49	0.03	1.29
95133		Immunotherapy, 4 insect venoms	1.03	0.67	0.05	1.75
95134		Immunotherapy, 5 insect venoms	1.11	0.72	0.05	1.89
95135		Immunotherapy, one antigen	0.43	0.28	0.02	0.73
95140		Immunotherapy, many antigens	0.39	0.25	0.02	0.66
95150		Antigen therapy services, 1 dose	1.36	0.88	0.06	2.30
95155		Antigen therapy services, 2 doses	1.83	1.18	0.08	3.09
95170		Antigen therapy services, whole body extract	0.95	0.62	0.04	1.61
96505		Chemotherapy injection, intravenous,	0.73	0.29	0.05	1.08
96509		Chemotherapy injection, intravenous,	0.71	0.29	0.05	1.05
96545		Provide chemotherapy agent	1.16	0.46	0.08	1.71
96913		Photochemotherapy, UV-A or B	0.33	0.39	0.04	0.76
97545		Work hardening/conditioning;	0.60	1.76	0.18	2.54
97546		Work hardening/conditioning;	0.39	1.15	0.12	1.66
98000		Medical conference by physician, 30 mins	0.40	0.75	0.03	1.18
98002		Medical conference by physician, 60 mins	0.71	1.34	0.06	2.12
98910		Medical conference by physician/team, 30 mins	0.47	0.88	0.04	1.39
98912		Medical conference by physician/team, 60 mins	0.87	1.64	0.07	2.58
98920		Physician phone consultation	0.20	0.36	0.02	0.58
98921		Physician phone consultation	0.30	0.22	0.02	0.55
98922		Physician phone consultation	0.49	0.35	0.04	0.88
99002		Device handling	1.14	0.82	0.09	2.05
99013		Telephone calls for consultation; brief	0.19	0.13	0.02	0.34
99014		Telephone calls for consultation; intermediate	0.34	0.24	0.03	0.61
99015		Telephone calls for consultation; complex	0.45	0.32	0.04	0.81
99024		Post-op follow-up visit	0.35	0.25	0.03	0.64
99025		Initial surgical evaluation	0.33	0.44	0.04	0.80
99050		Services requested after office hours	0.18	0.13	0.02	0.33
99052		Medical services at night	0.28	0.20	0.02	0.51
99054		Medical services, unusual hrs	0.23	0.16	0.02	0.41
99056		Non-office medical services	0.44	0.32	0.04	0.79
99058		Office emergency care	0.39	0.67	0.03	1.09
99062		Emergency care facility services; during hospital rounds	0.51	1.06	0.04	1.61
99064		Emergency care facility services; not during reg office hours	0.58	1.21	0.05	1.84



Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
99065		Emergency care facility services: during reg office hours	0.46	0.95	0.04	1.45
99071		Patient education materials	0.12	0.08	0.01	0.21
99075		Medical testimony	1.46	1.05	0.12	2.63
99078		Group health education	0.29	0.21	0.02	0.52
99080		Special reports or forms	0.24	0.17	0.02	0.43
99082		Unusual physician travel	1.99	1.43	0.16	3.58
99090		Computer data analysis	0.50	0.36	0.04	0.90
99150		Prolonged MD attendance, 30-60 mins	1.13	2.13	0.09	3.35
99151		Prolonged MD attendance, more than hour	1.80	3.39	0.14	5.33
99152		Newborn resuscitation; care of the	1.28	3.77	0.39	5.45
99154		Daily hospital management of epidura	0.93	1.75	0.07	2.75
99155		Medical conference by physician regarding	0.37	0.69	0.03	1.09
99156		Medical conference by physician regarding	0.63	1.19	0.05	1.87
99171		Critical care, subsequent follow-up; brief	0.45	0.95	0.04	1.44
99172		Critical care, subsequent follow-up; limited	0.53	1.13	0.04	1.70
99173		Critical care, subsequent follow-up; intermediate	0.63	1.33	0.05	2.01
99174		Critical care, subsequent follow-up; extended	0.88	1.86	0.07	2.81
99178		Development evaluation tests	0.52	0.68	0.05	1.26
99288		Direct advanced life support	0.58	1.20	0.05	1.83
99361		Physician/team conference	0.47	0.88	0.04	1.39
99362		Physician/team conference	0.87	1.64	0.07	2.58
99371		Physician phone consultation	0.15	0.11	0.01	0.27
99372		Physician phone consultation	0.26	0.19	0.02	0.47
99373		Physician phone consultation	0.51	0.36	0.04	0.91
99381		Preventive visit, new patient, infant	0.42	0.86	0.04	1.32
99382		Preventive visit, new patient, 1-4	0.43	0.89	0.04	1.36
99383		Preventive visit, new patient, 5-11	0.46	0.94	0.05	1.44
99384		Preventive visit, new patient, 12-17	0.46	0.95	0.05	1.46
99385		Preventive visit, new patient, 18-39	0.61	1.25	0.06	1.92
99386		Preventive visit, new patient, 40-64	0.69	1.42	0.07	2.18
99387		Preventive visit, new patient, 65 & over	0.67	1.37	0.07	2.10
99391		Preventive visit, est patient, infant	0.37	0.63	0.03	1.03
99392		Preventive visit, est patient, 1-4	0.39	0.65	0.03	1.07
99393		Preventive visit, est patient, 5-11	0.42	0.71	0.03	1.15
99394		Preventive visit, est patient, 12-17	0.43	0.74	0.04	1.21
99395		Preventive visit, est patient, 18-39	0.55	0.94	0.05	1.54
99396		Preventive visit, est patient, 40-64	0.62	1.06	0.05	1.73
99397		Preventive visit, est patient, 65 & over	0.68	1.16	0.06	1.90
99401		Preventive counseling, indiv, 15 mins	0.25	0.42	0.02	0.69
99402		Preventive counseling, indiv, 30 mins	0.45	0.77	0.04	1.26





Table A.2 (continued)

CPT-4 Code	Modifier	Description	Practice Expense RVU	Physician Work RVU	Malpractice Expense RVU	Total RVU
99403		Preventive counseling, indiv, 45 mins	0.59	1.00	0.05	1.63
99404		Preventive counseling, indiv, 60 mins	0.69	1.18	0.06	1.93
99411		Preventive counseling, group, 30 mins	0.43	0.73	0.04	1.19
99412		Preventive counseling, group, 60 mins	0.50	0.85	0.04	1.39
99420		Health risk assessment test	0.49	0.83	0.04	1.36
99431		Initial care, normal newborn	0.74	2.16	0.23	3.12
99432		Newborn care, not in hospital	0.46	1.35	0.14	1.95
99433		Normal newborn care, hospital	0.33	0.97	0.10	1.41
99438		Infant care to age one year	0.28	0.84	0.09	1.21
99440		Newborn resuscitation	1.28	3.77	0.39	5.45

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Table A.3  
Imputed Total RVUs for Clinical Laboratory Services

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
36415	Drawing blood	0.13
80031	Drug monitoring, one drug	0.85
80040	Serum radioimmunoassay	0.53
80052	Pre-marital profile	0.47
80053	Executive profile	0.82
80055	Obstetric profile	1.04
80056	Amenorrhea panel	1.71
80057	Male endocrine panel	1.25
80059	Hepatitis panel	1.57
80060	Hypertension panel	0.72
80060	Cardiac evaluation panel	0.78
80063	Cardiac injury panel	0.84
80064	Cardiac injury panel	0.74
80065	Metabolic panel	0.80
80066	Malabsorption panel	0.99
80067	Lung function panel	0.78
80068	Lung maturity profile	0.79
80070	Thyroid panel	0.73
80071	Thyroid panel with trh	1.03
80073	Renal panel	0.61
80075	Parathyroid panel	1.12
80080	Prostatic panel	1.01
80082	Pancreatic panel	0.83
80084	Pituitary panel	1.47
80085	Microcytic anemia panel	1.03
80086	Macrocytic anemia panel	1.18
80088	Transition panel	1.06
81003	Urinalysis	0.15
81004	Urinalysis	0.12
81010	Urinalysis	0.29
81020	Urinalysis	0.32
81030	Quantitative sediment analysis and	0.24
82005	Acetoacetic acid assay	0.43
82011	Acetylsalicylic acid assay	0.45
82012	Acetylsalicylic acid test	0.57
82015	Urine acidity assay	0.47
82043	Urine, quantitative	0.56
82044	Urine, semiquantitative	0.39
82060	Assay blood ethanol	0.64
82065	Assay urine ethanol	0.56
82070	Assay urine ethanol	0.50
82086	Assay of blood aldolase	0.56
82100	Test for urine alkaloids	0.80
82112	Assay of amikacin	0.91
82137	Assay of aminophylline	0.71
82138	Assay of amitriptyline	0.96
82156	Assay of urine amylase	0.37
82210	Assay/identify barbiturates	0.73
82231	Ria assay urine protein	0.69
82325	Assay calcium in blood	0.44
82335	Assay calcium in urine	0.30
82372	Assay serum carbamazepine	0.78
82437	Assay sweat chlondes	0.55
82470	Assay serum cholesterol	0.35



Table A.3 (continued)

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
82512	Assay of clonazepam	1.05
82529	Assay of cortisol	0.79
82530	Cortisol; free	0.92
82531	Assay plasma cortisol	0.76
82534	Ria assay urine cortisol	1.04
82545	Assay urine creatine	0.41
82546	Assay creatine & creatinine	0.29
82553	Mb fraction only	0.60
82555	Assay cpk in blood	0.34
82606	Bioassay for vitamin B-12	0.63
82620	Assay urine cystines	1.02
82627	Dehydroepiandrosterone (DHEA)	1.25
82628	Assay of desipramine	1.05
82640	Ria for blood digitoxin	0.69
82643	Ria assay for digoxin	0.68
82656	Assay of doxepin	0.79
82660	Test for drugs	0.68
82673	Estriol assay	0.78
82676	Assay estriol	0.84
82692	Assay of ethosuximide	0.87
82720	Assay blood fatty acid,ester	0.61
82730	Assay blood fibrinogen	0.41
82745	Blood folic acid bioassay	0.77
82747	Rbc	0.56
82750	Assay figlu acid in urine	0.53
82756	Free thyroxine index (T-7)	0.45
82787	Immunoglobulin subclasses	1.68
82790	Blood oxygen saturation	0.54
82793	Blood oxygen saturation	0.62
82795	Blood oxygen saturation	0.98
82942	Assay serum globulin	0.26
82949	Ferment assay of glucose	0.20
82954	Assay urine glucose	0.16
82995	Assay blood for gold	0.38
83000	Pituitary gonadotropin assay	0.88
83011	Elp assay haptoglobin	0.73
83052	Sickle hemoglobin test	0.27
83053	Assay hemoglobin solubility	0.30
83485	UV-assay blood hbd enzyme	0.32
83495	Assay urine corticosteroids	0.99
83518	Immunoassay, dipstick	0.42
83523	Assay of imipramine	1.00
83524	Assay urine indican	0.33
83545	Auto-assay serum iron	0.27
83546	Radio-assay serum iron	0.39
83555	Serum iron binding,auto-test	0.32
83565	Serum radio-iron binding	0.43
83589	Assay urine 17-ketosteroids	0.79
83600	Assay kynurenic acid	0.42
83610	Ria assay ldh enzyme	0.29
83620	Assay blood ldh enzyme	0.31
83626	Assay blood ldh enzymes	0.36
83628	Assay liver ldh enzyme	0.35
83631	Assay csf ldh enzyme	0.29
83645	Test blood for lead	0.44
83660	Assay urine for lead	0.62



Table A.3 (continued)

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
83685	Assay for lidocaine	0.29
83700	Assay blood lipids	0.57
83705	Assay blood lipid groups	0.55
83720	Blood lipoprotein assay	0.36
83721	Ldl cholesterol	0.36
83725	Assay blood lithium	0.42
83728	Ria assay of lsd	0.52
83740	Assay blood magnesium	0.34
83750	Assay blood magnesium	0.41
83755	Assay urine magnesium	0.35
83765	Assay urine magnesium	0.41
83830	Assay urine mercury	0.90
83845	Assay methaqualone	0.17
83883	Nephelometry, each analyte	0.61
83898	Nucleic acid probe amplification	2.52
83913	Nucleic acid probe, pcr	3.06
83947	Assay oxybutyric acid	0.25
84031	Assay blood pku	0.43
84037	Test urine phenylketones	0.19
84045	Assay phenytoin	0.72
84065	Assay prostate phosphatase	0.57
84090	Assay blood phospholipids	0.51
84134	Prealbumin	0.52
84136	Assay pregnanediol	0.31
84139	Assay pregnanetriol	0.39
84141	Assay primidone	0.80
84142	Assay procainamide	0.81
84153	Prostate specific antigen (PSA)	0.91
84170	Assay serum a/g ratio	0.31
84176	Special protein examination	0.28
84180	Assay urine protein	0.36
84185	Assay urine b-j protein	0.54
84190	Assay urine protein	0.73
84195	Assay spinal fluid protein	0.28
84200	Assay spinal fluid proteins	0.59
84208	Assay urine crystals	0.36
84230	Assay quinidine	0.76
84231	Radioimmunoassay	1.05
84236	Assay female hormones	2.47
84305	Somatomedin	1.72
84402	Testosterone; free	1.34
84405	Ria assay urine testosterone	1.35
84406	Assay protein-testosterone	1.29
84408	Assay thc	0.40
84420	Assay theophylline	0.71
84432	Thyroglobulin	0.83
84434	Assay thioridazine	0.54
84435	Assay thyroxine (T-4)	0.35
84447	Toxicology screening	0.76
84448	Toxicology sedatives screen	0.71
84455	Assay transaminase (SGOT)	0.27
84465	Assay transaminase (SGPT)	0.26
84466	Transferrin	0.57
84474	Assay trichloroacetic acid	0.45
84635	Zinc assay in urine	0.52
84695	Assay gentamicin	0.47





Table A.3 (continued)

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
84800	Assay neonatal tsh	0.77
84810	Assay tobramycin	0.57
85000	Bleeding time test	0.26
85005	Basophil blood cell count	0.29
85012	Eosinophil blood cell count	0.24
85341	Ptt inhibition test	0.52
85371	Fibrinogen, semiquantitative	0.32
85372	Fibrinogen, semiquantitative	0.12
85376	Fibrinogen, thrombin	0.31
85377	Fibrinogen, thrombin time	0.27
85426	Von willebrand factor assay	1.45
85544	Lupus (le) cell prep	0.55
85548	Rbc morphology	0.21
85580	Blood platelet count	0.23
85611	Substitution, plasma fractions	0.25
85615	Prothrombin utilization test	0.28
85618	Prothrombin-proconvertin	0.26
85630	Red blood cell size	0.25
85650	Rbc sedimentation rate	0.23
85705	Thromboplastin inhibition; tissue	1.62
86002	Agglutinins; panel	0.69
86006	Antibody, qualitative, first	0.31
86007	Antibody, qual., each added	0.30
86008	Antibody, quant., First	0.51
86009	Antibody, quant., Each added	0.34
86011	Leukocyte antibody detection	2.11
86012	Cold autoantibody absorption	0.41
86013	Cold autoantibody absorption	0.30
86014	Platelet agglutinins	1.16
86016	Rbc antibody screen	0.34
86019	Rbc antibody elution	0.33
86024	Rbc antibody identification	0.56
86031	Antihuman globulin test	0.26
86032	Antihuman globulin test	0.29
86033	Antihuman globulin test	0.37
86034	Antihuman globulin test	0.46
86039	Titer	
	0.57	
86064	Antitrypsin, alpha 1, ria	0.77
86066	Antitrypsin pi typing	0.78
86067	Antitrypsin, alpha-1, test	0.79
86068	Blood compatibility test	0.44
86070	Blood compatibility test	0.54
86080	Blood typing, abo only	0.22
86082	Blood typing, abo & rho(d)	0.28
86083	blood typing;antibody screen	0.47
86084	Blood typing;antigen screen	0.25
86085	Blood typing;antigen screen	0.35
86095	Blood typing, other antigens	0.26
86100	Blood typing, rho(d) only	0.23
86105	Blood typing, rh genotyping	0.29
86115	Blood typing, rhogam type	0.74
86128	Collect,storage pt own blood	1.39
86130	Collect,process pt own blood	3.55
86147	Cardiolipin	1.35
86149	Carcinoembryonic antigen,gel	0.95



Table A.3 (continued)

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
86151	Cea assay, ria or eia	0.98
86156	Cold agglutinin; screen	0.38
86157	Titer	
	0.39	
86158	Complement; c'1 esterase	0.97
86163	Complement; c'3 esterase	0.64
86164	Complement; c'4 esterase	0.68
86226	Single stranded	0.77
86244	Assay alpha-1 fetoprotein	0.89
86265	Blood unit service	1.07
86282	Hemolysins and agglutinins	0.43
86288	Hepatitis b core antigen ria	0.65
86298	Hepatitis a antibody test	0.69
86300	Heterophile antibody screen	0.31
86302	Hepatitis c antibody	0.84
86305	Heterophile antibody titer	0.43
86312	HIV antibody detection	0.73
86314	HIV confirmatory test	1.04
86319	Immunoassay for drugs	0.77
86335	Immunoglobulin typing, each	1.12
86342	Irradiation of blood product	0.72
86349	Leukocyte transfusion	4.87
86357	Lymphocytes, t&b distinction	2.38
86358	Lymphocytes, b-cell study	1.90
86377	Microsomal antibody, thyroid	0.81
86405	Precipitin test for blood	0.41
86410	Pretreatment rbcs; drugs	0.46
86421	Radioallergosorbent tests	0.67
86422	Radioallergosorbent tests	0.43
86586	Unlisted antigen, each	0.23
86587	Splitting of blood	0.40
86588	Streptococcus, screen, direct	0.31
86594	Thyroid autoantibodies	0.95
86595	Tissue culture	0.50
86600	Toxoplasmosis, dye test	0.79
86618	Borellia burgdorferi	1.03
86628	Candida	0.77
86631	Chlamydia	0.64
86632	Chlamydia, IgM	0.70
86635	Coccidioides	0.61
86645	Cytomegalovirus (CMV), IgM	0.90
86650	Treponema antibodies, fta-abs	0.61
86662	Treponema pallidum test	0.68
86663	Epstein-barr virus	0.83
86664	Epstein-barr virus	0.77
86665	Epstein-barr virus	0.91
86674	Giardia lamblia	0.79
86677	Helicobacter pylori	0.90
86685	Anti-aclr antibody	1.66
86688	HTLV-II	0.75
86695	Herpes simplex, type 1	0.99
86703	HIV-1 and HIV-2, single assay	0.66
86735	Mumps	0.57
86738	Mycoplasma	0.80
86747	Parvovirus	1.51
86759	Rotavirus	0.80



Table A.3 (continued)

<u>CPT-4 Code</u>	<u>Description</u>	<u>Total RVU</u>
86765	Rubeola	0.77
86774	Tetanus	0.93
86778	Toxoplasma, IgM	0.91
86787	Varicella-zoster	0.81
86850	Antibody screen, Rbc	0.33
86860	Antibody elution (Rbc)	0.35
86870	Rbc antibody identification	0.66
86890	Autologous blood or component	1.43
86891	Intra or postoperative salvage	2.40
86901	Rh (D)	0.20
86920	Compatibility test; immediate spin	0.51
86922	Antiglobulin technique	0.57
86930	Frozen blood, freezing	0.74
86945	Irradiation of blood product	0.74
86950	Leukocyte transfusion	4.30
86965	Pooling of platelets	0.46
86970	Rbc antibody detection	0.47
86978	Differential red cell absorption	0.41
86985	Splitting of blood/blood products	0.40
94710	Arterial blood gas analyses	1.92
99000	Specimen handling	0.16
99001	Specimen handling	0.27

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Table A.4

Services With Questionable Physician Work, Practice  
Expense, and Malpractice Expense RVUs  
for Physician Services

<u>CPT-4 Code</u>	<u>Description</u>	<u>Original Imputed Work Value</u>	<u>Adjusted Imputed Work Value</u>
<i>New Patient Preventive Medicine Visits</i>			
90750	Preventive medicine visit; new patient, 18 years+	0.98	1.41
90751	Preventive medicine visit; new patient, 12-17 years	0.78	0.95
90752	Preventive medicine visit; new patient, 5-11 years	0.73	0.94
90753	Preventive medicine visit; new patient, 1-4 years	0.82	0.89
90754	Preventive medicine visit; new patient, under 1 year	0.87	0.86
<i>Established Patient Preventive Medicine Visits</i>			
90760	Preventive medicine visit; est. patient, 18 years+	0.94	1.05
90761	Preventive medicine visit; est. patient, 12-17 years	0.69	0.74
90762	Preventive medicine visit; est. patient, 5-11 years	0.67	0.71
90763	Preventive medicine visit; est. patient, 1-4 years	0.65	0.65
90764	Preventive medicine visit; est. patient, under 1 year	0.63	0.63
<i>Critical Care Visit</i>			
99171	Critical care, subsequent follow-up; brief		



## **Appendix B**

### **The Process Used to Crosswalk 1990 Service Codes to a Clinically Equivalent 1993 Service Code**



## APPENDIX B

Both our comparison of fees in 1990 and 1993 and our construction of expenditure weights were constrained by changes in the CPT-4 service codes for office and hospital visits in 1992. Because of changes in CPT-4 services, a crosswalk between 1990 and 1993 codes was required. Certain service codes, including 99232, 99231, and 99283, could not be compared across the time period due to insufficient information in the Urban Institute's 1991 fee survey and were dropped from the 1990-1993 comparative analyses. However, expenditure weights (Table 1) were developed based on the available information. The following codes were crosswalked using the HCFA allocation rules:

<u>New Code</u>	<u>Old Code</u>	<u>Weight</u>
99203 Office Visit, New Patient	90015	100
99205 Office Visit, New Patient	90020	30
99213 Office Visit, Est Patient	90050	100
	90060	100
99214 Office Visit, Est Patient	90070	100
99222 Hospital Visit, Est Patient	90215	100
	90220	50
99231 Subsequent Hospital Visit	90250	80
	90260	50
99232 Subsequent Hospital Visit	90250	20
	90260	50
99283 Emergency Visit	90550	50
	90515	50



## **Apendix C**

### **1993 Urban Institute Fee Survey: Medicaid Fees by State**









Primary Care Procedures

State Name	P99203	P99205	P99213	P99214	P99283	P99083	P99084
Alabama	28.47	50.58	26.75	34.42	21.81	31.50	54.00
Alaska	76.03	80.00	76.03	80.00	116.00	80.00	110.00
Arkansas	59.00	125.00	33.00	64.00	46.00	45.00	62.00
California	46.00	42.17	16.56	27.60	32.68	24.60	41.00
Colorado	35.00	58.87	24.08	35.00	26.88	12.60	36.40
Connecticut	26.00	32.50	19.50	22.75	30.76	16.50	46.75
Delaware	34.00	49.00	21.00	26.00	25.00	26.00	49.00
DC	30.00	50.00	25.00	30.00	0.00	20.00	42.00
Florida	35.00	50.00	25.00	30.00	27.50	35.00	52.50
Georgia	51.24	95.03	30.26	40.32	42.99	46.48	78.04
Hawaii	60.70	77.34	25.66	43.30	56.37	39.20	74.00
Idaho	44.57	70.00	30.00	40.00	54.45	40.30	60.00
Illinois	25.05	42.20	18.00	25.05	20.55	29.55	48.80
Indiana	33.21	52.53	23.92	32.54	42.17	40.31	80.63
Iowa	31.35	51.40	19.72	28.21	34.90	18.28	18.28
Kansas	25.00	50.00	17.00	37.00	12.00	30.00	60.00
Kentucky	39.00	50.00	30.00	37.00	51.51	43.75	61.25
Louisiana	36.00	50.00	27.00	32.00	19.07	25.00	45.00
Maine	24.77	40.93	22.36	30.35	18.50	29.34	44.01
Maryland	37.00	50.00	31.00	38.00	21.00	21.00	40.50
Massachusetts	41.00	56.00	34.56	49.00	33.20	51.00	73.00
Michigan	35.20	65.18	21.00	41.00	30.07	11.83	47.14
Minnesota	28.48	88.00	24.00	49.00	16.37	33.75	65.80
Missouri	51.13	57.97	18.33	26.30	31.77	36.90	61.50
Montana	20.00	27.00	17.00	20.00	15.00	30.00	30.00
Nebraska	39.34	73.06	23.39	36.01	60.77	29.38	48.98
Nevada	47.50	90.20	25.29	37.94	37.94	41.90	69.12
New Hampshire	36.00	57.00	29.40	42.10	41.30	40.88	80.96
New Jersey	19.50	19.50	25.00	34.00	27.00	32.50	65.00
New Mexico	36.02	47.65	15.00	15.00	8.00	16.00	31.50
New York	11.00	19.50	23.48	26.63	27.26	30.42	53.40
North Carolina	47.01	19.50	11.00	19.50	14.17	15.00	30.00
North Dakota	41.00	86.03	26.53	40.00	39.68	39.20	62.10
Ohio	31.21	74.00	21.40	40.08	26.53	47.00	85.00
Oklahoma	34.97	56.90	17.59	26.77	22.46	31.06	38.82
Oregon	40.93	64.19	30.70	30.70	32.43	32.11	50.87
Pennsylvania	22.50	61.48	18.06	28.59	31.13	6.00	38.93
Rhode Island	18.00	22.50	22.50	22.50	35.00	22.50	22.50
South Carolina	30.00	18.00	18.00	18.00	10.50	18.00	18.00
South Dakota	31.70	66.80	20.00	35.00	29.45	25.00	45.00
Tennessee	40.00	60.00	21.10	31.50	36.70	37.80	50.00
Texas	47.57	86.53	27.00	32.00	62.25	39.13	68.00
Utah	36.85	67.04	26.87	40.85	47.57	24.69	39.13
Vermont	27.00	50.00	20.82	31.65	31.02	38.55	70.10
Virginia	30.00	43.38	21.00	30.00	22.00	24.00	48.00
Washington	52.91	100.07	24.20	31.50	42.25	37.50	65.00
West Virginia	52.50	99.00	31.91	47.59	26.65	29.71	47.09
Wisconsin	29.66	43.58	40.50	48.75	75.75	72.00	103.50
Wyoming	50.98	92.74	28.80	43.78	42.91	0.00	73.90
						40.00	60.00



Hospital and Obstetric Procedures

State Name	P99231	P99232	P99254	P59400	P59410	P59515	P59510
Alabama	23.29	28.05	74.25	1500.00	1150.00	1500.00	1500.00
Alaska	42.08	55.61	200.00	1394.00	1600.00	2592.36	
Arizona	84.00	33.00	98.00	940.00	900.00	940.00	
California	21.00	30.36	57.40	961.20	480.60	961.27	
Colorado	15.40	29.12	58.80	520.84	793.63	1402.39	
Connecticut	22.00	22.00	55.00	910.00	609.70	1663.00	
Delaware	39.20	54.75	66.47	981.00	680.00	981.00	
DC	18.00	18.00	60.00	1500.00	900.00	1550.00	
Florida	29.00	31.00	67.50	1000.00	800.00	1000.00	
Georgia	30.22	43.73	113.79	1205.00	901.00	1605.00	
Hawaii	30.07	40.00	117.91	630.20	472.80	675.65	
Idaho	18.78	31.42	79.46	1074.27	700.00	1050.00	
Illinois	14.65	19.55	47.70	808.20	550.00	958.20	
Indiana	32.03	39.69	103.80	769.20	591.60	904.50	
Iowa	19.34	23.13	63.65	848.51	761.49	979.04	
Kansas	8.40	8.40	45.00	1400.00	900.00	700.00	
Kentucky	37.50	45.00	79.50	1310.00	900.00	900.00	
Louisiana	25.00	32.00	125.00	1234.00	860.00	1100.00	
Maine	16.61	20.96	39.85	909.00	450.00	450.00	
Maryland	14.50	16.00	50.00	1317.00	895.00	948.00	
Massachusetts	26.44	30.41	90.00	1316.00	592.00	637.00	
Michigan	20.37	29.29	74.69	857.18	540.00	540.00	
Minnesota	29.25	33.75	90.00	857.81	607.20	1062.60	
Mississippi	21.65	26.13	110.25	953.81	575.05	657.34	
Missouri	12.00	15.00	28.00	1075.00	550.00	600.00	
Montana	38.57	40.20	98.76	1170.45	726.75	1232.50	
Nebraska	21.08	33.72	84.30	844.00	507.00	608.32	
Nevada	27.90	40.20	102.20	1104.97	828.29	1130.43	
New Hampshire	22.00	26.00	78.00	1000.00	810.00	900.00	
New Jersey	15.00	15.00	62.00	435.50	296.00	417.50	
New Mexico	19.50	23.24	64.12	937.14	510.24	927.40	
New York	6.75	6.75	20.00	1037.00	679.00	734.00	
North Carolina	26.79	38.64	98.14	1160.50	738.50	844.00	
North Dakota	15.02	37.46	98.00	830.80	500.00	700.00	
Ohio	15.70	19.82	33.62	767.98	500.00	600.00	
Oklahoma	21.90	27.09	72.37	1000.00	700.00	800.00	
Oregon	16.77	19.18	71.59	926.79	573.23	737.61	
Pennsylvania	17.00	17.00	49.00	1092.50	800.00	800.00	
Rhode Island	10.00	10.00	40.00	750.00	425.00	425.00	
South Carolina	11.40	16.15	42.75	990.00	700.00	700.00	
South Dakota	23.90	37.50	98.70	682.00	444.00	885.00	
Tennessee	14.16	18.32	66.22	1100.00	725.00	925.00	
Texas	27.14	38.97	99.16	1108.97	700.00	1108.97	
Utah	21.03	30.19	76.83	849.00	567.02	567.02	
Vermont	17.00	24.00	70.00	945.00	688.00	688.00	
Virginia	31.68	38.48	90.00	1200.00	864.00	1134.00	
Washington	15.90	21.01	67.72	1450.15	674.95	874.92	
West Virginia	50.25	61.50	136.50	897.50	1121.88	1650.12	
Wisconsin	18.28	18.28	78.64	925.82	590.74	1218.83	
Wyoming	29.09	41.76	106.27	1260.00	787.50	1102.50	





## Surgical Services

State Name	P43235	P58120	P58150	P66984	P69436.5
Alabama	189.00	195.00	744.78	1121.64	109.99
Alaska	450.00	550.00	2200.00	3000.00	450.00
Arkansas	278.00	278.00	912.00	1280.00	198.00
California	85.30	183.44	733.76	909.63	151.61
Colorado	140.41	133.72	568.31	869.18	167.15
Connecticut	78.75	207.00	828.00	793.50	127.00
Delaware	316.50	184.63	648.83	765.80	156.67
DC	166.00	109.00	675.00	990.00	108.00
Florida	207.00	174.50	663.00	946.50	157.50
Georgia	226.19	207.33	786.42	1150.76	206.73
Hawaii	375.91	216.82	837.47	1213.45	525.77
Idaho	126.71	216.82	803.07	1124.30	184.71
Illinois	221.40	208.05	715.40	973.60	111.75
Indiana	293.07	283.90	825.56	1268.32	309.40
Iowa	365.84	254.60	848.72	1520.06	295.00
Kansas	190.00	275.00	500.00	750.00	260.00
Kentucky	328.13	350.00	1225.00	1662.50	481.25
Louisiana	177.84	724.42	823.15	823.15	420.00
Maine	69.20	92.70	338.40	597.15	104.38
Maryland	111.60	209.00	356.00	728.00	124.50
Massachusetts	258.00	202.00	787.00	1170.24	155.00
Michigan	162.98	138.26	536.60	784.45	153.01
Minnesota	277.50	251.25	1016.25	1425.00	281.25
Mississippi	143.75	101.76	487.15	591.15	107.18
Missouri	100.00	97.00	360.00	500.00	153.50
Montana	175.26	187.77	636.31	1055.17	261.61
Nebraska	170.35	162.24	689.52	1135.68	261.61
Nevada	338.30	314.90	1166.60	1679.90	402.48
New Hampshire	150.00	100.00	462.00	750.00	121.50
New Jersey	141.00	67.50	310.50	479.50	93.75
New Mexico	174.35	188.71	748.94	1876.84	404.97
New York	80.00	60.00	240.00	440.00	150.00
North Carolina	173.83	152.23	665.34	793.89	175.44
North Dakota	221.50	120.00	621.75	1250.00	172.80
Ohio	232.94	194.12	543.53	745.42	232.95
Oklahoma	195.13	132.92	548.43	821.80	143.76
Oregon	185.43	146.74	724.14	1005.00	211.29
Pennsylvania	179.50	169.00	518.50	927.00	147.75
Rhode Island	210.00	84.00	420.00	600.00	79.50
South Carolina	177.00	193.00	663.00	722.00	125.61
South Dakota	287.30	252.00	1008.00	1618.20	264.60
Tennessee	231.80	230.61	765.68	1089.90	178.50
Texas	179.51	162.04	697.89	815.33	181.40
Utah	167.18	173.96	555.02	1114.51	256.74
Vermont	187.00	88.00	374.00	660.00	66.00
Virginia	372.50	358.00	1250.00	1716.00	272.48
Washington	135.05	123.78	526.26	773.50	104.20
West Virginia	402.75	461.25	1631.25	2372.25	621.00
Wisconsin	346.24	203.73	771.66	1223.53	284.87
Wyoming	264.60	252.00	1071.00	1764.00	474.07



Imaging and Laboratory Services

State Name	P70450	P71020	P76805	P81000	P87081	P88305
Alabama	157.50	23.40	58.50	1.26	1.35	31.38
Alaska	585.00	85.00	126.00	4.81	9.87	80.00
Arkansas	243.00	30.00	139.00	4.71	9.67	56.00
California	184.38	22.54	81.61	4.56	7.60	51.20
Colorado	179.58	21.21	70.70	4.68	9.62	63.00
Connecticut	139.86	20.70	69.00	3.30	6.00	46.75
Delaware	173.02	33.23	79.13	3.58	9.91	35.00
DC	162.75	25.00	100.71	3.75	3.20	24.00
Florida	164.00	26.50	95.50	3.00	5.50	39.50
Georgia	194.41	30.55	115.63	4.92	9.36	64.71
Hawaii	209.41	32.77	113.30	4.92	10.07	42.08
Idaho	178.64	29.88	88.90	4.92	6.32	56.68
Illinois	242.70	21.15	70.65	3.45	5.75	40.35
Indiana	216.00	35.50	66.70	7.10	13.21	33.20
Iowa	188.22	29.70	58.55	4.79	6.57	56.10
Kansas	220.00	42.00	90.00	4.83	8.40	96.50
Kentucky	267.42	21.00	113.75	4.89	9.36	63.79
Louisiana	184.29	32.90	114.22	4.80	9.86	53.10
Maine	43.20	15.58	53.46	3.42	5.40	34.20
Maryland	183.50	15.50	56.00	4.10	8.50	38.00
Massachusetts	145.00	25.00	128.07	3.96	6.97	51.90
Michigan	130.56	20.56	77.79	2.83	5.37	34.14
Minnesota	275.25	43.08	110.33	4.91	5.30	45.00
Mississippi	174.10	27.67	105.30	4.88	10.07	43.57
Missouri	152.00	16.50	65.00	3.00	5.50	38.65
Montana	134.67	22.41	167.20	4.90	6.54	54.27
Nebraska	126.80	154.21	173.19	5.93	10.07	27.54
Nevada	201.09	44.73	153.05	6.00	10.00	81.60
New Hampshire	150.00	16.00	64.00	4.18	9.90	40.00
New Jersey	125.00	13.88	55.00	1.20	4.15	46.00
New Mexico	651.26	27.54	117.50	8.18	16.23	56.00
New York	120.00	15.00	55.00	1.80	5.20	44.43
North Carolina	163.32	25.99	98.40	3.60	7.20	18.72
North Dakota	227.00	29.80	126.36	4.72	6.10	50.00
Ohio	163.06	24.85	95.77	4.72	9.69	10.85
Oklahoma	133.47	21.25	53.75	4.72	9.68	46.17
Oregon	282.16	23.72	74.82	4.27	9.68	42.46
Pennsylvania	130.00	30.00	77.50	3.00	5.20	25.00
Rhode Island	115.00	20.00	30.00	4.00	6.00	18.00
South Carolina	102.80	16.40	62.35	2.45	5.90	34.90
South Dakota	258.00	34.70	100.00	4.81	9.90	67.59
Tennessee	172.64	50.00	72.24	4.83	9.90	85.45
Texas	171.99	27.14	102.65	4.92	9.36	46.41
Utah	160.25	19.76	50.60	4.16	7.45	46.99
Vermont	191.00	23.00	75.00	7.87	7.00	70.00
Virginia	350.00	24.00	90.00	4.92	9.50	116.00
Washington	159.74	20.48	72.04	4.10	6.45	36.44
West Virginia	207.31	34.37	130.91	4.91	10.08	48.30
Wisconsin	248.36	31.93	132.77	4.81	7.37	43.94
Wyoming	220.15	33.53	127.94	4.72	8.00	87.00



## **Appendix D**

### **Medicaid Payment Policy Survey Instrument**



## Medicaid Payment Policies

In the each section below, we ask for information on a number of physician payment issues including: global surgical payments, payment for office medical supplies, payments for physicians who assist at surgery, payments for multiple procedures, and payment differentials for sites of service, types of providers, and geographic areas. We are also interested in payments for the technical and professional component of radiology services and diagnostic tests and payments for anesthesia services. In addition to responding to the questions listed below, if you have documentation such as payment manuals which further describe these payment policies, we would appreciate receiving a copy. Thank you for taking the time to complete this survey.

If you have any questions regarding the survey instrument, please call Steve Norton (202) 857-8651 or John Holahan (202) 857-8666.

### 1. Global Surgical Payments: Major Procedures

Some payers reimburse surgical procedures using a global fee. The concept of a global fee implies that a single fee is billed and reimbursement is made for all necessary services normally furnished by the surgeon before, during, and after the procedure. Payments for routine care related to the surgery itself are not typically paid for separately.

The pre-operative period included in the global payment might cover, for example, pre-operative visits in or out of the hospital by the surgeon beginning the day before the surgery. The post-operative period might include a 90 day post-operative period which would include follow-up visits and services such as dressing changes, removal of sutures, and removal of urinary catheters.

Below is a list of 10 procedures and a list of components which might be included in your state's definition of a global surgical payment. The services reflect procedures commonly performed in the hospital, outpatient department, and physician's office.





Please provide the following information for each procedure listed on the following page.

- |              |   |
|--------------|---|
| Column (1.a) | Indicate whether or not the initial evaluation or consultation in which the decision to undergo surgery is typically included in the global surgical payment for the procedure.   |
| Column (1.b) | Indicate how many pre-operative visits are typically included in the global surgical payment for the procedure.   |
| Column (1.c) | Indicate how many post-operative hospital and office visits are typically included in the global surgical payment for the procedure.  |
| Column (1.d) | Indicate the length of the post-operative period.   |
| Column (1.e) | Indicate whether there are other services, in addition to the routine services associated with the procedure, which are typically included in the global surgical payment. Please provide brief examples of services which are included in the global surgical payment. |



CPT-4 Code*	Service Description	(1.a.) Surgical Consultation	(1.b.) Number of Pre-Operative Visits	(1.c.) Number of Post-Operative Hospital and Office Visits	(1.d.) Length of Post-Operative Period	(1.e.) Other Services
<b>MAJOR PROCEDURES</b>						
27447	Arthroplasty, knee, condyle and plateau; medial and lateral components (total knee replacement)					
33512	Coronary artery bypass, vein only; three coronary venous grafts					
47605	Cholecystectomy with cholangiography					
<b>AMBULATORY PROCEDURES</b>						
29877	Knee arthroscopy, surgical; debridement/shaving of articular cartilage					
42820	Tonsillectomy and adenoidectomy, under age 12					
49505	Repair inguinal hernia, age 5 or over					
<b>MINOR PROCEDURES</b>						
17000	Destruction of benign facial lesion, one lesion					
28001	Incision and drainage of infected bursa, foot					
<b>ENDOSCOPY</b>						
52000	Cystourethroscopy (separate procedure)					

\* CPT-4 nomenclature are copyright 1993 American Medical Association



2. Overall Questions Regarding Global Surgical Payments

- (2.a) Is the global payment policy for other major procedures (procedures which involve a hospital admission) generally the same as the policy you have described above for total knee replacement, coronary artery bypass grafts, and cholecystectomy?

\_\_\_\_\_ Yes, the same global surgical payment policy is used for other major procedures

\_\_\_\_\_ No, a different global surgical policy is used for other major procedures

- (2.b) Does the global payment policy for other ambulatory procedures (procedures typically performed in an ambulatory surgical center or hospital outpatient department) generally include the same number and type of services you described above for the knee arthroscopy, inguinal hernia repair, and tonsillectomy and adenoidectomy?

\_\_\_\_\_ Yes, the same global surgical payment policy is used for other ambulatory procedures

\_\_\_\_\_ No, a different global surgical policy is used for other ambulatory procedures

- (2.c) Does the global payment policy for other minor procedures (procedures typically performed in physician's office) generally include the same number and type of services you described above for the destruction of benign facial lesions and incision and drainage of an infected foot bursa?

\_\_\_\_\_ Yes, the same global surgical payment policy is used for other minor procedures

\_\_\_\_\_ No, a different global surgical policy is used for other minor procedures

- (2.d) Does the global payment policy for endoscopies generally include the same number and type of services you described above for the cystourethroscopy?

\_\_\_\_\_ Yes, the same global surgical payment policy is used for other endoscopies

\_\_\_\_\_ No, a different global surgical policy is used for other endoscopies





3. Payments for Supplies

- (3.a) Except for drugs, do Medicaid payments for office-based medical and surgical procedures include payments for supplies that are incidental? Or are the supplies reimbursed separately? For example, are the bone marrow aspiration trays which are incidental to a bone marrow aspiration (CPT code 85095) reimbursed separately or are they included in a single payment for CPT code 85095?

\_\_\_\_\_ Yes, payments for office medical supplies are reimbursed separately

\_\_\_\_\_ No, payments for office medical supplies are not reimbursed separately (SKIP TO SECTION 4)

- (3.b) If you reimburse supplies separately, please provide additional examples of office medical procedures for which separate payments are made for supplies? If possible please also include the typical amount paid for these supplies.

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4. Payment for Physicians who Assist at Surgery

Physicians who assist at surgery are often paid a percentage of the primary surgeon's global payment. Medicare, for example, sets the payment level for assistants-at-surgery at 16% of the fee schedule amount for the global surgical service.

- (4.a) What percentage of the primary surgeon's global payment is paid to the assistant surgeon?

\_\_\_\_\_ % of the primary surgeon's global payment is paid to the assistant surgeon

- (4.b) Is this percentage typically the same for most surgical procedures?

\_\_\_\_\_ Yes, we use the same percentage of the global fee to determine payments for assistant surgeons, regardless of the surgical procedure performed (SKIP TO QUESTION 4.d)

\_\_\_\_\_ No, we use a different approach to determine payments for assistant surgeons depending on the procedure performed

- (4.c) If the process for determining payments to the assistant surgeon vary according to the procedure performed, please describe below how payments for the assistant surgeon are determined?

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- (4.d) Are there surgical procedures for which payment for a surgical assistant is not allowed? If payment for surgical assistants is not permitted for certain procedures, please describe these exceptions below.

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5. Payment for Multiple Procedures

If more than one procedure is provided on the same patient during a single "operative session," some payers will pay a reduced amount for the second procedure. For example, Medicare will pay 100 percent of the global fee for the highest valued procedure only, 50 percent of the global fee for the second most expensive procedure, and 25 percent of the global fee for the third, fourth and fifth most expensive procedures.

For Medicaid physician services, how are payments typically determined when other procedures, in addition to a primary procedure, are performed by the same physician during the same "operative session"?

- (5.a) Do you use this Medicare multiple procedure payment policy?

\_\_\_\_\_ Yes (PLEASE SKIP TO QUESTION 5.c)

\_\_\_\_\_ No, not always



(5.b) If you do not use the Medicare policy, please describe below the payment policy you use to determine fees for multiple procedures.

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(5.c) Are there any exceptions to this payment policy? Please describe these exceptions below.

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6. Payment Differentials by Place of Service

- (6.a) Do Medicaid payment rates typically vary depending on where the service is provided? For example, if a physician removes a malignant lesion on the face (CPT code 17260) in his/her office, would the physician receive the same amount as if it were performed in a hospital outpatient facility?

\_\_\_\_\_ Yes, the payment rates are the same (SKIP TO SECTION 7)

\_\_\_\_\_ No, the payment rates are different

- (6.b) Please indicate below the types of facilities that are subject to a payment differential.

\_\_\_\_\_ Physician's Office/Clinic

\_\_\_\_\_ Ambulatory Surgery Center

\_\_\_\_\_ Hospital Outpatient Department

\_\_\_\_\_ Hospital Inpatient Department

- (6.c) What types of services are subject to these payment differentials? If possible, please provide a list of services subject to this rule.

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- (6.d) How much do payments typically vary by place of service? Please describe the size of these payment variations below and provide examples of payment differentials, if possible.

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7. Payment Differentials by Type of Provider

Payment rates for physician services may vary depending on the type of specialist who provides the service. For example, if a family practitioner and a general surgeon both provide a 25 minute office visit (CPT code 99214) they may be paid different amounts for the same service. Further, if a family practitioner performs a vaginal delivery and an obstetrician performs a vaginal delivery, the reimbursement rates for the procedure may also vary by physician specialty.

- (7.a) Does Medicaid typically pay different amounts for the same service provided by different specialties?

- ☐ Yes, payment rates are differentiated by physician specialty
- ☐ No, payment rates are not typically differentiated by physician specialty (SKIP TO QUESTION 7.c)



- (7.b) If payment distinctions are made according to physician specialty, please describe below what specialties are affected by this rule, how payment rates are determined for each specialty, and the magnitude of these payment differentials. Where possible please include examples of services that are typically reimbursed differently depending on what physician specialty provided the service.

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Non-physician providers include Nurse Practitioners, Clinical Nurse Specialists, Nurse Midwives, Clinical Psychologists, Clinical Social Workers, Optometrists, Podiatrists, Chiropractors, and others. Some payers limit the fees paid to these providers to a percentage of the physician's fee. For example, the same payment may not apply to a psychologist and psychiatrist who both perform a psychiatric patient visit (CPT code 90801). Similarly, ophthalmologists and optometrists may not be reimbursed the same for an intermediate eye exam (CPT code 92002)?

- (7.c) Does Medicaid typically pay non-physician providers the same amount as physicians when the same service is provided?

\_\_\_\_\_ Yes, both providers are paid the same amount for the same service (SKIP TO SECTION 8)

\_\_\_\_\_ No, the providers are typically paid different amounts





- (7.d) If payment distinctions are made according to provider type, please describe the providers that are affected by this rule, how payment rates are determined for specific non-physician providers, and the magnitude of these payment differentials. Where possible please include examples of services that are typically reimbursed with payment differentials depending on the provider who rendered the service.

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8. Payments for the Professional and Technical Components of Radiology Services and Diagnostic Tests

Certain procedures are a combination of a professional component and a technical component. Radiology services and certain diagnostic tests are typically defined in terms of these components. The technical component of the service includes the cost of providing the service such as equipment costs, supplies, and technician labor. The professional component includes the physician portion of the service, such as the physician's work associated with the interpretation and report of the image or diagnostic test. If diagnostic tests or radiology tests are performed in a hospital setting, the physician would bill only for the professional component since the technical component would be included in the facility payment. On the other hand, if the service is provided in the office, a global bill (professional and technical combined) would be submitted since the equipment is owned by the physician.



- (8.a) How are Medicaid payments for each of these components determined?  
Please describe how these payments are determined

*Professional Component*

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*Technical Component*

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9. Geographic Payment Area

Some payers vary payment rates by geographic area. Payers might differentiate payments by geographic areas such as counties, metropolitan areas, or three-digit zip codes.

- (9.a) Do Medicaid physician payment rates typically vary by geographic areas in your state?

\_\_\_\_\_ Yes, payment rates vary by geographic area

\_\_\_\_\_ No, payment rates do not vary by geographic area and are the same regardless of the location of the provider  
(SKIP TO QUESTION 10.a)

- (9.b) If payments vary by geographic location, how are geographic areas defined? Please describe below.

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- (9.c) If payments vary by geographic area, what is the basis for these payment differences? For example, do geographic variations in payments reflect differences in the cost of living or do they reflect differences in historical charges? Please describe below the reasons why Medicaid payments vary by geographic area.

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10. Payments for Anesthesia Services

- (10.a) On average, how are payments determined for anesthesia services provided by an anesthesiologist? Please describe the process used to determine payments and cite fee schedules or policies that are used. For example, if the uniform relative value guide published by the American Society of Anesthesiologists or the relative value guide published by McGraw-Hill is used please indicate this in your response. Similarly, if you use the same policies used by Medicare, please note this in your explanation.

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- (10.b) In addition, please describe how payments for the anesthesiologist are determined when the anesthesiologist only supervises or directs the anesthesia services which are provided by a certified nurse anesthetist (CRNA)?

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(10.c) Finally, please describe how payments for the certified nurse anesthetist are determined.

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11. General Payment Information

(11.a) Do you use the Medicare Fee Schedule (MFS) as a baseline for determining Medicaid payments for physician services?

\_\_\_\_\_ Yes, the MFS is used (SKIP TO QUESTION 11.c)

\_\_\_\_\_ No, the MFS is not used

(11.b) If you do not use the MFS, how are Medicaid physician fees currently determined? Please describe the process used below.

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(11.c) Do you use the Medicare Principles as a baseline for determining Medicaid payment policies?

\_\_\_\_\_ Yes, the Medicare Principles are used

\_\_\_\_\_ No, the Medicare Principles are not used

*Thank you for your time in answering these questions. Please mail your completed survey to:*

*John Holahan, Director  
Health Policy Center  
The Urban Institute  
2100 M Street, N.W.  
Washington, D.C. 20037*

*or fax to (202) 223-1149.*



**Appendix E**  
**(Table E.1 - E.7)**

**Estimating RVUs for Physician Services**





Table E.1

## General Basis for Physician Payment

STATE	GENERAL BASIS FOR PHYSICIAN PAYMENT:
AL	Indicate that the MFS is used as a basis for physician payment. <sup>1</sup>
AK	Indicate that screened historical charges are used as a basis for physician payment.
AR	Indicate that the Blue Shield physician fee schedule is used as a basis for physician payment.
AZ	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
CA	Indicate that the 1969 California Relative Value Study is used as the basis for physician payment.
CO	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
CT	Indicate that screened historical charges are used as a basis for physician payment.
DE	Indicate that screened historical charges are used as a basis for physician payment.
FL	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
GA	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
HI	Indicate screened historical charges are used as a basis for physician payment.
ID	Indicate that the 1974 Revision of the California Relative Value Studies is used as a basis for physician payment.
IL	Indicate that physician consultants set rates.
IN	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
IA	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
KY	Indicate that screened historical charges are used as a basis for physician payment.
LA	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
ME	Indicate that multiple relative value studies are used as the basis for physician payment.
MD	Indicate that screened historical charges are used as a basis for physician payment.
MA	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
MI	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
MN	Indicate that screened historical charges are used as a basis for physician payment.



Table E.1 (continued)  
Page 2

STATE	GENERAL BASIS FOR PHYSICIAN PAYMENT:
MO	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
MT	Indicate that screened historical charges are used as a basis for physician payment.
MS	Indicate that the MFS is used as a basis for physician payment. <sup>1</sup>
NH	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
NJ	Indicate that the New Jersey Blue Shield fee schedule is used as a basis for physician payment.
NM	Indicate that a combination of screened historical charges and information from multiple relative value studies used as a basis for physician payment.
NY	Information unavailable
NC	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
ND	Information unavailable.
OH	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
OK	Indicate that the MFS is used as a basis for physician payment. <sup>3</sup>
OR	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
PA	Information unavailable.
SC	Indicate that the MFS is used as a basis for physician payment. <sup>1</sup>
SD	Indicate that screened historical charges are used as a basis for physician payments.
TX	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
UT	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
VT	Indicate that McGraw-Hill relative values are used as a basis for physician payment.
VA	Indicate that screened historical charges are used as a basis for physician payment.
WA	Indicate that the MFS is used as a basis for physician payment. <sup>2</sup>
WI	Indicate that screened historical charges are used as a basis for physician payment.
WY	Indicate the use of a variety of relative value studies as the basis for physician payment.



Table E.2  
State by State Comparison of Medicare and Medicaid Physician Payment Policies

Survey Question	Same as Medicare		Different		No Information - Unclear	
	States	#	States	#	States	#
<b>Global Surgical Payment</b>						
Medicare does not include the surgical consultation in the global payment. Under state Medicaid policy, is the surgical consultation included in the global payment?	AK, AL, AZ, CA, CT, DE, GA, ID, KY, MA, ME, MI, MN, MS, MT, NC, ND, NY, OR, SC, VT, WA, WY	23	AR, CA, FL, HI, IA, IL, IN, LA, MO, NH, NJ, OK, PA, TX, UT, VA, WI	17	MD, NH, OH, SD	4
For Major and ambulatory procedures, post-operative services related to the surgery cannot be billed separately by a physician for 90 days after the surgery. For minor procedures, the length of the post-operative payment period is 10 days. For endoscopic procedures, physicians can bill separately immediately after the procedure. What is the length of the global post-op period in the state Medicaid program? <sup>1</sup>	AK, AZ, FL, GA, KY, MI, OK, WI	8	AL, AR, CO, IA, ID, IL, ME, MN, MO, MS, MT, NC, ND, NH, NJ, NM, NY, OR, PA, SC, SD, TX, UT, VT, VA, WY, AL, CT, MA, CA, IN	31	LA, MD, MT, NM, SD	5
<b>Payment for Supplies</b>						
Medicare currently allows physicians to bill separately for office supplies for certain procedures. Under Medicaid policy, can physicians bill separately for office supplies?	AK, AZ, CA, CO, CT, GA, HI, IA, ID, IN, ME, MI, MN, MS, MT, NC, ND, NH, NM, NY, OH, OR, SC, UT, VA, VT, WY	26	AL, AR, DE, FL, IL, KY, LA, MA, MD, MO, ND, NJ, OK, PA, SD, TX, WA, WI	18		
<b>Payment for Anesthesia Services</b>						
Medicare pays for anesthesia services on the basis of relative values developed by the American Society of Anesthesiologists. On what is payment for anesthesia services based under state Medicaid policies? <sup>2</sup>	AL, CT, DE, FL, LA, MA, MI, MN, MS, ND, NH, SC, SD, VA, VT, WI, WY	17	AK, AR, CA, CO, ID, MD, MO, MT, OR, PA, UT, WA	12	AZ, GA, HI, IA, IL, IN, KY, ME, NC, NJ, NM, NY, OH, OK, TX	15
Medicare currently reimburses time spent on anesthesiology procedures in 15 minute time increments. Under state Medicaid policies, what is the basis for reimbursement of the time component of anesthesiology services?	CA, CT, FL, GA, ID, LA, MA, ME, MS, ND, NH, NJ, NY, NM, MI, MO, SC, SD, TX, VT, WI, WY	22	HI, IL, UT, MN, AK, AR, MD, MT, OR, PA, NC	11	AL, AZ, CO, DE, IA, IN, KY, OH, OK, VA, WA	11





Table E.2 (continued)  
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Survey Question	Same as Medicare		Different		No Information - Unclear	
	States	#	States	#	States	#
<b>Payment for Physicians Who Assist</b>						
Medicare pays physicians-who-assist, 16% of the total fee. Under state Medicaid policy, how are physicians-who-assist reimbursement? <sup>3</sup>	AL, FL, GA, IA, MI, TX	6	AK, AR, AZ, CA, CO, CT, DE, HI, ID, IL, IN, KY, LA, MA, MD, ME, MN, MS, MT, ND, NH, NJ, NM, NY, OH, OK, OR, PA, SC, SD, UT, VA, VT, WA, WI, WY	37	MO	1
Currently, Medicare allows reimbursement to physicians-who-assist, for those services which historically have used assistants at surgery for at least 5 percent of the cases. Under state Medicaid policy, what determines whether or not the state will pay for a physician-who-assists?	AL, AZ, CO, FL, GA, HI, IA, ID, LA, ME, MI, MN, NH, NM, DK, TX, VT, WA, WI	19	AK, AR, CA, DE, KY, MA, ME, MS, MT, NJ, NY, OR, PA, SC, SD, UT, VA, WY	18	CT, IL, IN, MD, ND, NC, OH	7
<b>Payment for Professional Component of Services</b>						
Medicare currently allows for separate billing of the professional and the technical component of some services. Payment for these services are computed based on MFS RVS RVUs and a conversion factor. Under state Medicaid policy, how is the professional component reimbursed? <sup>4</sup>	CT, GA, IA, MA, MI, NC, NH, OH, OR, TX, UT, VT, WA, WY	14	AK, AL, AR, AZ, CO, CT, HI, ID, IL, KY, LA, MD, ME, MO, MS, MT, NJ, NY, OK, SC, SD, VA, WI	23	DE, FL, IN, MN, ND, NM, PA	7
<b>Payment for Multiple Procedures</b>						
Currently Medicare will pay 100 percent of the primary procedure, 50 percent of the secondary procedure and 25 percent of the third, fourth and fifth procedures performed by a physician on the same patient on the same day. Under state Medicaid policy, how are physicians reimbursed for multiple procedures? <sup>5</sup>	FL, GA, HI, IA, ID, MA, MI, ND, NH, NM, OH, UT, VT, WA	14	AL, AK, AR, CA, CO, CT, DE, IL, IN, KY, LA, ME, MD, MN, MS, MO, MT, NJ, NY, NC, ND, OK, OR, PA, SC, TX, VA, WI, WY	29	MO	1





Table E.2 (continued)  
Page 3

Survey Question	Same as Medicare		Different		No Information - Unclear	
	States	#	States	#	States	#
<b>Payment for Provider Distinctions</b>						
Currently Medicare does not differentiate payments on the basis of physician specialty. Under state Medicaid policy, are physicians paid differently on the basis of specialty?	AK, AR, AZ, CA, CO, DE, FL, GA, HI, IL, IN, IA, KY, MO, MA, MI, MS, MT, NH, NM, NC, NO, OH, OK, OR, PA, SD, UT, VT, VA, WY	33	AL, CT, HI, LA, ME, MN, NJ, NY, SC, TX, WI	11		
Currently some non-physician providers are paid less than physician providers for similar services. Does state Medicaid policy differentiate payment on the basis of non-physician provider status?	AL, AK, AZ, AR, CA, DT, FL, GA, HI, IO, IL, IN, IA, KY, LA, ME, MA, MN, MS, MT, NH, NJ, NM, NY, NC, NO, OK, SC, SD, TX, VT, WI	33	CO, DE, MD, MI, MO, OR, PA, UT, VA, WA, WY	11		
<b>Site of Service Differential</b>						
Currently, for a number of procedures, Medicare reimburses physicians different amounts depending on the site-of-service. Do state Medicaid policies differentiate payment on the basis of site-of service?	CA, IL, MN, MO, MT, NC, OH, TX	8	AL, AK, AZ, AR, CO, CT, DE, FL, GA, HI, ID, IN, IA, KY, LA, ME, MD, MA, MI, MS, NH, NJ, NM, NY, NO, DK, OR, PA, SC, SD, UT, VT, VA, WA, WI, WY	36		
<b>Geographic Adjustment</b>						
Currently, Medicare provides special payment provisions for physician services provided in HPSAs to insure access. Under state Medicaid policies, are payments differentiated on the basis of geographic location to insure access?	AL, UT, WI	3	AK, AZ, AR, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NH, NJ, NM, NY, NC, NO, OH, OK, OR, PA, SC, SD, TX, VT, VA, WA, WY	41		
Currently, Medicare adjusts the practice cost and malpractice liability components of the payment schedule to fully recognize the geographic variation in these costs. Under state Medicaid policy, do states differentiate payment on the basis of differentials in practice costs or cost of living?	AK	1	AL, AZ, AR, CA, CO, CT, DE, FL, GA, HI, ID, IL, IN, IA, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NH, NJ, NM, NY, NC, NO, OH, OK, OR, PA, SC, SD, TX, UT, VT, VA, WA, WI, WY	43		

1. See Table A.3 for a description of policies in states where policies differ from Medicare policies.
2. See Table A.4 for a description of policies in states where policies differ from Medicare policies.
3. See Table A.5 for a description of policies in states where policies differ from Medicare policies.
4. See Table A.6 for a description of policies in states where policies differ from Medicare policies.
5. See Table A.7 for a description of policies in states where policies differ from Medicare policies.



Table EA.3

Global Service Package -- Length of Post-Operative Period<sup>1</sup> -- in those States  
with Policies Different than Medicare Policies

STATE	LENGTH OF POST-OPERATIVE PERIOD
AL	62, 62, 62, 0 days for Major, Ambulatory, Minor, and Endoscopic procedures, respectively.
AR	10 days for all services.
CA	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 45 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 3 days.
CO	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 60 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 17000 = 0 days; 18001 = 15 days. Endoscopic procedures: 52000 = 0 days.
CT	No global policy.
DE	Usual or customary.
HI	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 90 days; 42820 = 30 days; 49505 = 45 days; Minor procedures: 0 days. Endoscopic procedures: 0 days.
ID	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 90 days; 42820 = 30 days; 49505 = 90 days. Minor procedures: 17000 = 0 days; 28001 = 5 days. Endoscopic procedures: 52000 = 0 days.
IL	Varies within general Medicare procedure groupings. Major procedures: 30 days. Ambulatory procedures: 30 days. Minor procedures: 17000 = 0 days; 28001 = 30 days. Endoscopic procedures: 52000 = 0 days.
IN	Varies within general Medicare procedure groupings. Major procedures: 27447 = 90 days; 33512 = 7 days; 47605 = 10 days. Ambulatory procedures: 29877 = 21 days; 42820 = 10 days; 49505 = 10 days. Minor procedures: 10 days. Endoscopic procedures: 52000 = 0 days.
IA	Varies within general Medicare procedure groupings. Major procedures: 14 days. Ambulatory procedures: 29877 = 14 days; 42820 = 5 days; 49505 = 14 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.
LA	No specified time period (but limit the number of visits)
ME	Major procedures: 30 days. Ambulatory procedures: 30 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.
MD	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 30 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.



Table E.3 (continued)  
Page 2

STATE	LENGTH OF POST-OPERATIVE PERIOD
MA	No post-operative period.
MN	Major, Minor, Ambulatory = 14 days. Endoscopic procedures: 0 days.
MO	No global (with exception of OB delivery codes).
MT	Usual or customary.
NH	30 days for all procedures.
NJ	Varies within general Medicare procedure groupings. Major procedures: 27447 = 90 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 60 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.
NM	Usual or customary.
NY	Varies within general Medicare procedure groupings. Major procedures: 27447 = 180 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 90 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.
NC	Varies within general Medicare procedure groupings. Major procedures: 90 days. Ambulatory procedures: 29877 = 90 days; 42820 = 10 days; 49505 = 10 days. Minor procedures: 10 days. Endoscopic procedures: 52000 = 0 days.
ND	No global policy.
OR	90 days for Major and Ambulatory procedures. 0 days for Minor and Endoscopic procedures.
PA	Varies within general Medicare procedure groupings. Major procedures: 27447 = 180 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 90 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 17000 = 0 days; 28001 = 7 days. Endoscopic procedures: 52000 = 0 days.
SC	30 days for Major, Ambulatory, and Endoscopic procedures. No post-operative period for Minor procedures.
SD	Usual and customary.
TX	Major procedures: 180 days. Ambulatory procedures: 42 days. 0 days for Minor and Endoscopic procedures.
UT	42 days for Major and Ambulatory procedures. No post-operative period for Minor and Endoscopic procedures.
VT	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47605 = 45 days. Ambulatory procedures: 29877 = 60 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 17000 = 0 days; 28001 = 15 days. Endoscopic procedures: 52000 = 0 days.
VA	No global policy.





Table E.3 (continued)

Page 3

STATE	LENGTH OF POST-OPERATIVE PERIOD
WA	No specified time period (limited to a percentage of procedure billings).
WY	Varies within general Medicare procedure groupings. Major procedures: 27447 = 120 days; 33512 = 90 days; 47505 = 45 days. Ambulatory procedures: 29877 = 60 days; 42820 = 30 days; 49505 = 45 days. Minor procedures: 0 days. Endoscopic procedures: 52000 = 0 days.

1. We are interested in both whether or not states classify procedures similarly to Medicare, as well as whether or not the length of the global billing period is similar to Medicare policy. As a result, we report both whether or not the global period varied within broad Medicare procedure groupings as well as the length of the global period.





Table E.4

Basis for Anesthesia Payments in Those States with Policies  
Different than Medicare Policies

STATE	BASIS FOR ANESTHESIA PAYMENTS
AK	Screened historical charges
AR	Blue Shield fee schedule
CA	1969 California relative value study
CO	Medicare allowable for same service
ID	State-specific research
MD	Surgical fee associated with procedure
MO	1969 California relative value study
MT	Screened historical charges
OR	Screened historical charges
PA	Screened historical charges
UT	McGraw Hill Relative Value Scale
WA	McGraw Hill Relative Value Scale



Table E.5

Payment for Physicians-Who-Assist in those States with Policies  
Different than Medicare Policies

STATE	PAYMENT FOR PHYSICIANS- WHO-ASSIST	STATE	PAYMENT FOR PHYSICIANS- WHO-ASSIST
AK	25% of full payment	MT	50% of full payment
AZ	20% of full payment	NH	20% of full payment
AR	20% of full payment	NJ	15% of full payment
CA	20% of full payment	NM	20% of full payment
CO	20% of full payment	NY	25% of full payment
CT	20% of full payment	ND	20% of full payment
DE	20% of full payment	OH	25% of full payment
HI	15% of full payment	OK	20% of full payment
ID	20% of full payment	OR	20% of full payment
IL	% not paid: 69.35 for 1 hour	PA	20% of full payment
IN	20% of full payment	SC	20% of full payment
KY	20% of full payment	SD	20% of full payment
LA	20% of full payment	UT	20% of full payment
ME	20% of full payment	VT	25% of full payment
MD	20% of full payment	VA	20% of full payment
MA	15% of full payment	WA	20% of full payment
MN	20% of full payment	WI	20% of full payment
MS	20% of full payment	WY	20% of full payment



Table E.6

Payment for Professional Component<sup>1</sup> of Services in those States with Payment Policies Different than Medicare Policies

STATE	PAYMENT FOR PROFESSIONAL COMPONENT OF SERVICES
AK	Screened historical charges
AZ	30% of payment for all components
AR	66% of Blue Shield fee schedule
CO	75% of 1974 California relative value unit amount
CT	50% of screened historical charges
HI	Screened historical charges or 35% of full payment
ID	1974 revision of the California relative value study
IL	50% of fee for all components
KY	Lesser of 40% of fee for all components or billed charges
LA	40% of fee for all components
MD	Procedure: 70002-76499 42% of fee for all components; 76500-79999 50% of fee for all components.
MS	70% of Medicare payment for professional component
MO	50% of Medicare payment for professional component
MT	40% of screened historical charges for all components
NJ	McGraw-Hill Relative Value Scale
NY	40% of fee for all components
OK	40% of fee for all components
SC	70% of Medicare payment for all components
SD	40% of screened historical charges for all components
VA	40% of screened historical charges for all components
WY	American Academy of Radiologist Relative Values
WI	40% of screened historical charges for all components

1. With the exception of Louisiana, which doesn't recognize the technical component of services, payment for the technical is the difference between the global rate and the professional component.





Table E.7  
Payment for Multiple Procedures in those States with  
Policies Different than Medicare Policies

STATE	PAYMENT FOR MULTIPLE PROCEDURES
AL	100% of primary procedure; 50% for all allowed subsequent procedures
AK	Lesser for billed or UCP
AZ	100% of primary procedure; 50%, 25%, and 10% for second, third, and all subsequent procedures, respectively
AR	100% of primary procedure and 50% for all allowed secondary procedures
CA	100% of primary procedure; 50%, 25%, 10%, and 5% for second, third, fourth, and fifth procedure
CO	100% of primary and 50% for all allowed subsequent procedures (single incision) 100% of primary and 80% for all allowed subsequent procedures (multiple incisions)
CT	100% of primary and 0% for all allowed subsequent procedures (single incision) 100% of primary and 50% for all allowed subsequent procedures (multiple incisions)
DE	100% of primary and 50% for all allowed secondary procedures
IL	100% of primary and 50% for all allowed secondary procedures
IN	100% of primary and 50% for all allowed secondary procedures
KY	100% of primary and 50% for all allowed secondary procedures
LA	100% of primary and 50% for all allowed secondary procedures
ME	100% of primary and 50% for all allowed secondary procedures
MD	100% of primary procedure; 50% for all allowed secondary procedures
MN	100% of primary procedure; 50% for all allowed secondary procedures
MS	100% of primary procedure; 0% for all subsequent procedures (single incision) 100% of primary procedure; 50% for all allowed subsequent procedures (multiple incisions)
MT	100% for all procedures
NJ	Payment not to exceed 200% of primary procedure payment
NY	Payment not to exceed 150% of primary procedure payment
NC	100% of primary procedure and 50% for all allowed secondary procedures
OK	100% of primary procedure; 50% for all allowed secondary procedures
SC	100% of primary procedure; 50% for all allowed secondary procedures
TX	100% of primary procedure; 50% for all allowed secondary procedures
VA	100% of primary procedure; 50% for all allowed secondary procedures
WY	100% of primary procedure; 50% for all allowed secondary procedures
OR	100% of primary procedure; 50%, 50%, and 25% for second, third, and all subsequent procedures, respectively
PA	100% of primary procedure; 25% for all allowed secondary procedures
WI	100% of primary procedure; 50%, 25%, and 13% for second, third, and all allowed subsequent procedures



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